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26/12/88

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(इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके)  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

## भाग III—खण्ड 2

### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
Notifications and Notices issued by the Patent Office Relating to Patents and Designs]

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Calcutta, the 23rd April, 1988

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1—37 GI/88

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## REGISTRATION OF PATENT AGENTS

The following person has been registered as Patent Agent :—

Ram Prakash Yadav,  
701, Ganesh Ashram,  
Anoop Shahar Road,  
Distt : Aligarh-202001.

The 16th March, 1988

221/Cal/88. (1) Viktor Alexandrovich Budyko, (2) Vladimir Vladimirovich Konovalenko, (3) Andrei Fedosevich Ivanchenko, (4) Valentin Dmitrievich Kutsov, (5) Boris Nikolaevich Lastochkin, (6) Vladimir Mikhailovich Krokmal, (7) Nikolai Nikolaevich Zhdan. Device for electro-analgesia of patients tissues.

222/Cal/88. Siemens Aktiengesellschaft. Combined gas and steam turbine power plant.

The 17th March, 1988

223/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to temperature control arrangement for an extruding process.

224/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to temperature control arrangement for an extruding process.

225/Cal/88. McNeilab, Inc. Ibuprofen sustained release matrix and process.

226/Cal/88. Stone & Webster Engineering Corporation. Particulate solids cracking apparatus and process.

227/Cal/88. Krone Aktiengesellschaft. Wire connector for cable wires.

228/Cal/88. Mi'Ray International, Inc. Gas liquid tower structure.

The 18th March, 1988

229/Cal/88. Sri Satyajit Dutta. Digital fare meter.

230/Cal/88. Jean Frederic Melchior. Piston for internal combustion engines and like machines.

231/Cal/88. Eaton Corporation. Exclusion seal assembly.

232/Cal/88. Plant Genetics, Inc. and Research Corporation Technologies, Inc. Synthetic substrate for filamentous fungi.

The 21st March, 1988

233/Cal/88. Betz International, Inc. Process and composition for stabilized distillate fuel oils.

234/Cal/88. Cerit SpA. Method to wind down a yarn package and device to perform the method.

235/Cal/88. Ethicon, Inc. Surgical Hemostatic clips.

236/Cal/88. (1) Industrial Quimica Del Nalon, S.A.; (2) Empresa Nacional De Fertilizantes, S.A. Process for obtaining acids and salts in dissolution by ion exchange resins.

The 22nd March, 1988

237/Cal/88. Shun-Fa Hsu. Automatic shutting off and alarming device for dripping injection use.

238/Cal/88. Oliver Rubber Company. Method and apparatus for replacing sidewall of tyre.

239/Cal/88. Carryspace Leichtbaulemente GmbH. Slab-shaped composite element.

240/Cal/88. Aluminium Pechiney. Process for the preparation of mother alloys of iron and neodymium by electrolysis of oxygen-bearing slats in medium of molten fluorides.

241/Cal/88. Avco Synthetic Turf Production Distribution Inc. Tufted carpeting having stitches thermally bonded to backing (Convention dated 16th September, 1987 (78605/87) Australia).

APPLICATIONS FOR PATENTS FILED AT THE  
PATENT OFFICE BRANCH, 61, WALLAJAH ROAD,  
MADRAS-600 002

The 7th March, 1988

141/Mas/88. Umesh Korde. Oscillating water column wave power desalination system.

142/Mas/88. Umesh Korde. A device for fixing rods, wires, ropes and the like in vertical positions.

143/Mas/88. Davy McKEE (Sheffield) Limited. Peel assembly for an ingot manipulator.

144/Mas/88. Davy McKEE (Sheffield) Limited. A manipulator for metal ingots.

145/Mas/88. Ishihara-Sangyo Kaisha Ltd. Imidazole compounds and biocidal composition comprising the same for controlling harmful organisms

146/Mas/88. Inland Steel Company. Apparatus for injecting alloying ingredient into molten metal stream.

The 8th March, 1988

147/Mas/88. Hoechst Aktiengesellschaft. Porous gas electrode.

148/Mas/88. Dana Corporation. Variable ratio lever.

149/Mas/88. Societe Des Produits Nestle S.A. A process for preparing a food composition. (Divisional to Patent Application No. 886/Mas/84).

150/Mas/88. Dr. Med. Wolfgang Wagner. A device for a control of metabolism.

151/Mas/88. Minnesota Mining and Manufacturing Company. Encapsulant compositions for use in signal transmission devices.

The 9th March, 1988

152/Mas/88. Russell N. Dashow. Laminated tape and use thereof.

153/Mas/88. Sobrevin Societe de brevets Industrials-Etablissement. Thread feeder.

154/Mas/88. Forex Neptune. Monitoring drilling mud. (March 9, 1987; United Kingdom).

The 10th March, 1988

155/Mas/88. Dr. Krishnapillai Viswanathan Nair; (2) Mohan Viswanathan Nair & (3) (Mrs.) Shobha Mohan. A process for the treatment of industrial effluvia of titania of titania plants.

156/Mas/88. Glaude Alain Gratzmuller. A differential hydraulic jack for the control of electric circuit-breakers.

157/Mas/88. Japan Cotton Technical and Economic Research Institute Mengyokaikan. Device for removing short fibers.

158/Mas/88. Dana Corporation. Two piece lever damper.

APPLICATIONS FOR PATENTS FILED IN THE  
PATENT OFFICE BRANCH AT TODI ESTATES, IIIRD  
FLOOR, SUN MILL COMPOUND, LOWER PAREL  
(WEST), BOMBAY-400 013

The 1st February 1988

- 23/Bom/88. Nippon Kokan Kabushiki Kaisha. Method of manufacturing low carbon ferro-chromium.
- 24/Bom/88. Virendra Rasiklal Doshi, Suketu Rasiklal Doshi, Brijesh Mahendrakumar Parekh & Shailesh Mahendrakumar Parekh. A novel process for preparing mercury in solid form, mouldable/deformable solid mercury and/or any article made from solid form of mercury.
- 25/Bom/88. Virendra Rasiklal Doshi, Suketu Rasiklal Doshi, Brijesh Mahendrakumar Parekh & Shailesh Mahendrakumar Parekh. A process of preparing mercury in solid state and the solid mercury and/or any article made from the solid mercury obtained by the said process.

The 5th February, 1988

- 26/Bom/88. Chandrasekhar Govind Ghanekar. Non pickable and non-forcible padlock, such, which cannot be opened with any other key but its own pre-matched one; neither can this padlock key be duplicated to match any lock; nor can it be forced open by cutting the shackle or lever-forced, when mounted on an aldrapp and locking bolt.

The 8th February, 1988

- 27/Bom/88. Ghanshyam Shankar Tasgaonkar. L.P.G. Stove.

The 10th February, 1988

- 28/Bom/88. Ravindrakumar Ramjibhai Yadav. Water cooling arrangement created in a refrigerator.

The 11th February, 1988

- 29/Bom/88. Gujarat Plastic & Metal Containers Pvt. Ltd. Temper proof container with cap.

The 12th February, 1988

- 30/Bom/88. Daystar Electronics Pvt. Ltd. Portable electronic alarm unit.

- 31/Bom/88. Mayank Ramniklal Shah. A method and an apparatus for air conditioning.

The 15th February, 1988

- 32/Bom/88. Ujjaini Chowdhury. Improvement relating to strip or pouch packaging machine.

#### ALTERATION OF DATE

162260. Ante dated to 18th August, 1983. (841/Del/85).

162275. Anted dated to 31st January, 1983. (521/Mas/85).

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CLASS : 126 C&D.

162241

Int. Cl. B011 11/00.

#### A METHOD OF MAKING A SENSOR FOR MULTI ION SENSITIVE ELECTRODE AND VOLTAMMETRIC APPLICATIONS AND THE SENSOR SO MADE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : GOLLAKOTA PRABHAKAR RAO, NAVIN CHANDRA & GANESA GANAPADIGAL SUBRAMANIAM.

Application for Patent No. 709/Del/84 filed on 11th September, 1984.

Complete Specification left on 5th December, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

4 claims

A method for making a sensor for multi ion sensitive electrode and voltametric application comprising forming a base membrane by compressing a mixture of pure graphite and a room temperature cooled silicone, incorporating the membrane inside an electrode body which acts as a support for the membrane, sealing the membrane with the body using an epoxy sealant and fixing a cable to the membrane through an epoxy or moulded in an acetonitrile butadiene styrene plastic.

Provisional Specification 13 pages.

Compl. Specn. 15 pages. Drg. 1 sheet.

CLASS : 194B.

162242

Int. Cl. A 61n 1/04.

#### ELECTRODE FOR ELECTROCARDIOGRAM EXAMINATION.

Applicant : ASTRA-TECH AKTIEBOLAG, A SWEDISH COMPANY, OF ARSTAANGSVAGEN 1A, S-117 43 STOCKHOLM, SWEDEN.

Inventor : STIG LUNDBACK.

Application for Patent No. 808/Del/84 filed on 17th October, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

8 claims

An electrode for electrocardiogram examinations intended to be attached with the aids of a hose or tube through which a vacuum is applied from a vacuum source, said electrode comprises an electrically conductive electrode plate coupled

to a measuring instrument which lies against a skin by an electrode surface, an inflexible backpiece supporting said electrode plate and sealing means surrounding said electrode plate, characterised in that said sealing means include a sealing ring extending circumferentially around said electrode plate and terminating in a sealing lip, said sealing lip abuts said skin in the operative position such that said skin and said sealing means define together a cavity to which a vacuum is applied from said vacuum source, said electrode plate and said sealing lip being movable relative to one another under the action of a resilient force which strives to separate the electrode plate from a plane defined by said sealing lip from a working position to a rest position, said movement shutting off the vacuum supply to said cavity under vacuum, said electrode plate in both working and rest position, is in same position relative to the backpiece and said sealing ring is mountably supported against the backpiece in said working position.

Compl. Specn. 14 pages. Drg. 1 sheet.

CLASS : 40F.

162243

Int. Class : C10j 3/20.

#### GAS SPARGER FOR EXOTHERMIC GAS SOLID REACTIONS.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, FARI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : RAMACHANDRA NAGESH PARLIKAR, MOHAMMAD ABDUL WAHAB AND ASAD ALI KHAN.

Application for Patent No. 884/Del/84 filed on 22nd November, 1984.

Complete Specification left on 9th December, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 2 claims

A gas sparger for exothermic gas solid reactions comprising a gas inlet  $N_1$  at the bottom of the sparger, a nozzle (16) provided at its outlet  $N_2$ , inner and outer cooling tubes arranged concentrically to the gas inlet one after the other and provided with an inlet ( $N_3$ ) and an outlet ( $N_4$ ) respectively, the outer tube being provided with opening near its lower end and an annular duct (A) provided in between two way seals (9) for collecting the coolant, worm drive (13 & 14) being provided for rotating the outer tube and the nozzle, the outer tube also being provided with screw conveyor flights (18) for moving the reacted products downwardly, the upper portion of the sparger along with the conveyor flights (18) being enclosed in a housing consisting of a cylindrical upper part (1) and a conical lower part (2) the conical lower part being provided with an aperture ( $N_5$ ) for discharging the material located in the flange (3) fixed immediately below the conveyor flights (18) on which the conical lower part rests and a base plate (15) fixed to the flange (3) supporting the entire sparger.

Provisional Specification 3 pages. Drg. 1 sheet.

Compl. Specn. 6 pages. Drg. 1 sheet.

CLASS : 67C & 206E.

162244

Int. Cl. H01q 11/00 & H03b 7/02.

ISOLATING AND MATCHING DEVICE TO ENABLE A HEATING ELEMENT OF A MOTOR VEHICLE ELECTRICALLY HEATABLE WINDOW WHICH IS ESSENTIALLY APERIODIC AND NON RESONANT AT RF FREQUENCIES TO BE USED AS A RECEIVING AERIAL.

Applicant : BSH ELECTRONICS LIMITED, A BRITISH COMPANY OF SCOTTISH PROVIDENT HOUSE, 52 BROWN STREET, MANCHESTER M2 2LD, UNITED KINGDOM.

Inventors : JERZY JACEK KROPIELNICKI, JAMES DAVID & BRAIN EASTER.

Application for Patent No. 836/Del/84 filed on 12th December, 1984.

Convention date 25th February, 1984/8404982/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 7 claims

An isolating and matching device to enable a heating element of a motor vehicle electrically heatable window which is essentially a periodic and non-resonant at RF frequencies to be used as a receiving aerial, said device having input leads for connection to a motor vehicle D.C. power supply, output leads for connection to said heating element, an aerial terminal for connection to an aerial feeder circuit of a receiver, isolating circuitry coupled with said input and output leads and operable to permit passage of D.C. power from said input leads to said output leads while isolating or blocking passage of RF signals from said output leads to said input leads, and aerial matching circuitry interposed between said output leads and said aerial terminal characterised in that said matching circuitry comprises an inductance connected at one end to said output lead and a capacitance connected at one end thereto to one end of said inductance and is connected at its other end to the said aerial terminal and a parallel resonant circuit comprising a further inductance connected to a further capacitance is interposed between the first said capacitance and the aerial terminal so as to bring the said heating element to series or parallel resonance near the centre of the VHF band thereby to effect efficient VHF signal reception.

Compl. Specn. 26 pages. Drgs. 2 sheets.

CLASS : 68(E+1).

162245

Int. Cl. H02j 3/00.

CONTROL PULSE GENERATOR FOR GENERATING CONTROL PULSES FOR IGNITION OF THYRISTORS SUPPLYING AN INDUCTANCE REGULATING THE REACTIVE POWER OF AN ELECTRICAL POWER NETWORK.

Applicant : CGEE ALSTHOM OF 13, RUE ANTONIN RAYNAUD, 92309 LEVALLOIS-PERRE, FRANCE, A FRENCH COMPANY.

Inventor : PATRICK CHARLES.

Application for Patent No. 844/Del/84 filed on 18th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 4 claims

Control pulse generator for generating control pulses for ignition of thyristors supplying an inductance regulating the reactive power of an electrical power network, said inductance being connected to the network in series with a static bidirectional switch of said thyristors, said control pulse generator having a sawtooth signal generator whose output is connected to one input of a comparator, another input of said comparator connected to receive a control signal for varying firing angle of said thyristors, output of said comparator being connected to a circuit for generating said thyristor control pulses, the output of said circuit for generating said thyristor control pulses being connected both to the thyristors control gates and to a zero reset input of said sawtooth signal generator, said sawtooth signal generator having means for generating a signal of a slope of simple incline or of double incline; switching between said sloped signals of simple incline or double incline being controlled by the disappearance of current from said inductance; said control

pulse generator developing an image of the current in said inductance, said image being based on a voltage  $u$  being itself an image of the voltage across terminals of said inductance which is fed to an integrator having an output connected to an integrator reset signal generator driven by the output signal from said comparator to which said integrator reset signal generator is connected, and wherein the output of said integrator is also connected to a circuit establishing mean value of said current, the output of said circuit establishing mean value of said current being connected directly to one of the inputs of a two-input switch with a single, common output and to the other input of the said two-input switch through an inverter defining an inversion control for said switch and being connected to the input of the voltage  $u$  integrator, the sign change of voltage  $u$  alternately causing switching to one, then the other of the two inputs to said switch whose output drives one of two inputs of a summing circuit, the other input of said summing circuit receiving a firing angle control voltage and the output of said summing circuit connected to said another input of said comparator for providing said control signal for varying said firing angle to said comparator.

Compl. Specn. 12 pages. Drgs 3 sheets.

CLASS : 130D. 162246

Int. Cl. C22b 13/02.

#### METHOD FOR THE PRODUCTION OF METALLIC LEAD FROM LEAD CONTAINING STARTING MATERIALS.

Applicant : BOLIDEN AKTIEBOLAG, A SWEDISH COMPANY, OF STUREGATAN 22, BOX 5508, S-11485 STOCKHOLM, SWEDEN.

Inventors : BIRON KARL LINDQUIST & STIG ARVID PETERSSON.

Application for Patent No. 973/Del/84 filed on 31st December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

#### 9 claims

A method for the production of metallic lead from lead-containing starting materials such as herein described which comprises smelting said starting materials under oxidising conditions to form an oxidic melt and thereafter reducing said melt characterised in that said reduction is effected by incorporating a solid carbonaceous reduction agent into said melt in the presence of solid carbonate-containing material of the kind such as herein described.

Compl. Specn. 12 pages.

CLASS : 182 A 162247

Int. Cl. : C13c 1/00.

#### "A CLOSED SUCTION PUMPING DEVICE FOR A SUGAR CANE CRUSHING MILL".

Applicant : PREM SWAROOP SRIVASTAVA, AN INDIAN NATIONAL OF MAWANA SUGAR WORKS MAWANA 250402 DISTT., MEERUT (U.P.), INDIA.

Inventor : PREM SWAROOP SRIVASTAVA.

Application for Patent No. 5/Del/85 filed on 4th January, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 6 Claims

A closed suction pumping device for a sugar cane crushing mill comprising a juice tray characterized in that said tray being connected directly to a pump through a pipe, said pipe being disposed at an angle of 5 to 15° with

respect to the horizontal plane and having at least one bent portion adjacent to the pump.

Compl. Specn. 8 pages.

Drg. 1 sheet.

CLASS : 65 A<sub>1</sub> & 206 E.

162248

Int. Cl. : H011 11/00

#### GATE TURN-OFF THYRISTOR.

Applicant : WESTINGHOUSE BRAKE AND SIGNAL COMPANY LIMITED, A BRITISH COMPANY, OF PEW HILL, CHIPPENHAM, WILTSHIRE, UNITED KINGDOM.

Inventor : THOMAS ALEXANDER ANDERSON.

Application for Patent No. 26/Del/85 filed on 15th January, 1985.

Convention date January 31st, 1984/8402459/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005

#### 7 Claims

A gate turn-off thyristor comprising four super-imposed layers of semiconductor material of alternate conductivity, the first of said layers constituting an anode emitter, the second of said layers constituting anode shorting array, the third of said layers constituting a controlling base region and the fourth of said layers constituting a cathode emitter region characterised in that said anode shorting array consists of a plurality of concentric polygonal formations extending through said first layer and said cathode emitter region consists of a plurality of linear elements grouped together in a plurality of sectors disposed about a common centre which is substantially coincident with the center of said anode shorting array, said linear elements in each said sector being parallel to each other.

Compl. Specn. 9 pages.

Drg. 1 sheet.

CLASS : 4 A<sub>2</sub>.

162249

Int. Cl. : B 64 c 1/00.

#### AIRCRAFT CABIN.

Applicant & Inventors : GRIGORY DMITRIEVICH SUKHOVERKHOV, OF ULITSA KRASNORAMEISKAYA, 9, KV 62, MOSCOW, U.S.S.R., VIKTORIA GEORGI-EVNA TERESCHENKO, OF ULITSA AKADEMIKA ILJUSHINA, 10 KV. 54, MOSCOW, U.S.S.R., JURY VASILIE-VICH PAVLIUKOV, OF MOSKOVSKI OBLASTI MOZHAISKOE SHOSSE, 38, KV. 49, ODINTSOVA, U.S.S.R., RADY PETROVICH PAPKOVSKY, OF ULITSA SVOBODY, 81, KORPUS 3, KV. 550, MOSCOW, U.S.S.R. AND SERGEI IVANOVICH SUMACHEV, OF ULITSA OTRAD AND SERGEI IVANOVICH SUMACHEV, OF ULITSA OTRADNAYA, 13A, KV. 212, MOSCOW, U.S.S.R., ALL U.S.S.R. CITIZENS.

Application for Patent No. 33/Del/85 filed on January 17, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 11 Claims

An aircraft cabin comprising a fuselage, a main floor and a mezzanine floor overlying the main floor and connected with the fuselage by means of a support structure; the support structure of the mezzanine floor being made up of blocks braced with respect to the fuselage, each block including a horizontally extending beam having one of its end detachably secured to the fuselage and the other end connected with the mezzanine floor, and a suspension member of an adjustable length, having one of its end pivotally connected with the beam and the other end detachably connected with the fuselage.

Compl. Specn. 20 pages.

Drgs 8 sheets.

CLASS : 40 E &amp; F.

162250

Int. Cl. : A62d 9/00.

**AN IMPORTED PARTICULATE MATTER SEPARATION DEVICE AND METHOD THEREOF.**

Applicant & Inventor : PRABHAT KUMAR, AN INDIAN CITIZEN OF C-5/16, SAFDARJUNG DEVELOPMENT AREA, NEW DELHI-110 016, INDIA.

Application for Patent No. 504/Del/86 filed on 6th June, 1986.

Complete Specification left on 25th June, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**21 Claims**

A device for separation of particulate matter and stream from their mixture carrier medium :

said device comprising of housing with carrier medium inlet stream exit, particulate exit, described herein;

within said housing said stream exit being connected to a round adaptor on which is attached a spinning body with a matching adaptor being a revolving junction;

said adaptor on said spinning body divides the spinning body into two parts, outer face and inner face, where the inner face being the inner side of said spinning body which being connected to the said stream exit through said adaptor junction, the outer face being the outer side of said spinning body form;

said spinning body herein described having perforations on surface said spinning body spins mounted on a rotatable shaft through a hub assembly driven by a rotation giving source;

said carrier medium being a draft to cause flow from said outer face and through said perforated surface of said spinning body, the particulate matter being blocked, intercepted, impacted caused by the perforated moving form of said spinning body, deflected and spun away from the flow of the carrier medium, collected inside said housing and ejected through said particulate exit while said stream passes through said perforations and stream exit being substantially cleaned stream.

Provl. Specn. 2 pages.

Compl. Specn. 22 pages.

Drgs. 3 sheets.

CLASS : 158 C<sub>2</sub>.

162251

Int. Cl. : B61g 1/02 &amp; 3/08.

**RAILWAY CAR COUPLER FOR THE END OF A RAILWAY CAR BODY.**

Applicant : DRESSER INDUSTRIES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, ONE OF THE UNITED STATES OF AMERICA, OF THE DRESSER BUILDING, P.O. BOX 718, DALLAS, TEXAS 75221, U.S.A. MANUFACTURERS.

Inventors : ROBERT WILLIAM DANAHER & RICHARD FRANK KLIMOWICZ.

Application for Patent No. 513/Del/83 filed on 27th July, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**3 Claims**

A railway car coupler for the end of a railway car body comprising a shank having an elongated chamber extending

axially along the longitudinal axis of the shank, a head connected to a first end of said shank, a knuckle pivotally connected to said head and having closed and open positions, a lock disposed within the shank chamber and axially movable therewithin between knuckle engaged and disengaged positions, and thrower means pivotally connected to said lock and having an arm disposed to one side of said pivot for engaging said knuckle to rotate the knuckle to its open position, characterized by :—

an uncoupling device including a flexible cable having an inner shaft and an outer sheath concentrically disposed about the shaft for relative movement between said shaft and said sheath, one end of said shaft being connected to said thrower means, and cam means having the other end of said shaft connected thereto for movement therewith; and

actuating means for rotating said cam means, with rotation of said cam means causing said shaft to move axially for rotating said thrower means to open said knuckle.

Compl. Specn. 10 pages.

Drgs. 2 sheets.

CLASS : 38 &amp; 116C.

162252

Int. Cl. : B65g 17/00 17/40 &amp; F16g 15/12.

**"CHAIN LINK FOR A DRAG CHAIN CONVEYOR".**

Applicant : FULLER COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF STATE OF DELAWARE, U.S.A., OF 2040 AVENUE "C" P.O. BOX 2040, BETHLEHEM, PENNSYLVANIA 18001, U.S.A.

Inventor : THOMAS GENORGE KRULICK.

Applicant for Patent No. 563/Del/83 filed on 18th August, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**7 Claims**

A chain link for adrag chain conveyor wherein each chain link comprises a generally cross-shaped member having a first member and a second member perpendicular to the first member; said first member having a lug at one end and an enlargement at its other end; the said lug of one chain link being dimensioned to be connected to the enlargement on an adjacent, similar link to form a drag chain conveyor; said enlargement having a pair of projections, each extending outwardly from said enlargement on opposite sides of the first member; each projection having a pair of faces on opposite sides thereof, each shaped to be selectively engaged by a drive sprocket of the drag chain conveyor.

Compl. Specn. 13 pages.

Drgs. 2 sheets.

CLASS : 6 B<sub>1</sub> & 89.

162253

Int. Cl. : F 17 d—3/04.

**A DEVICE FOR DETECTING LEAKAGE OF GAS FROM THE VALVE OF L P GAS CYLINDERS.**

Applicant : BAL KRISHAN GUPTA, I-3, HAUZ KHAS ENCLAVE, NEW DELHI-110016, INDIA, AN INDIAN NATIONAL.

Inventors : BAL KRISHAN GUPTA.

Application for Patent No. 127/Del/1984 filed on the 13th February, 1984.

Complete Specification left on the 11th May, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 2 Claims

A device for detecting leakage of gas from the valve of the L P Gas cylinder, comprising of a transparent housing, having a base plate at its lower end, a central tube open at both ends extending into the housing through the said base plate and being integral with the said housing, the end of the tube outside the housing being adapted to be connected to the said valve gas tight such that the central tube does not press the pin of the valve, an inverted tube closed at its top end provided inside the said housing to surround the other end of the said central tube, the lower end of the said inverted tube being seated on ribs provided on the said base plate, a dust cover detachably fitted to the upper end of the said housing, the said cover being provided with holes, the said housing being filled with a liquid such as water or glycerine.

Provl. Specn. 04 pages

Drgs. 01 sheet.

Compl. Specn. 06 pages

CLASS : 6 B<sub>4</sub> & 89.

162254

Int. Cl. : F 17 C-3/04.

## A DEVICE FOR DETECTING LEAKAGE OF L P GAS CYLINDER.

Applicant : BAL KRISHAN GUPTA (AN INDIAN NATIONAL) 13 HAUZ KHAS ENCLAVE, NEW DELHI-110 016, INDIA.

Inventors : BAL KRISHAN GUPTA.

Application for Patent No. 501/Del/1984 filed on the 21st June, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## (DRAWINGS)

A device for detecting leakage of L P Gas Cylinder comprising of a cylindrical transport housing having a base plate at its lower end, an integrally formed inner central tube extending at the upper end into the housing and having its lower end projecting from the housing to be connected gas tight to the cylinder valve, an inverted tube closed at the top end covering the outer surface of the said inner central tube inside the housing and resting on the base plate of the said housing, a cover having holes secured to the top of said housing, an elastic bellow for fixing the bottom of the housing therein with a spring fitted inside the bellow, the bottom of said bellow when pressed downward against the top surface of the cylinder body, makes a gas tight connection.

Compl. Specn. 7 pages

Drg. 1 sheet.

CLASS : 89.

162255

Int. Cl. : F 17 C-3/04.

## LEAKAGE DETECTION FOR L P GAS EQUIPMENTS, FIXTURES &amp; FITTINGS.

Applicant : BAL KRISHAN GUPTA (AN INDIAN NATIONAL) L-3, HAUZ KHAS ENCLAVE, NEW DELHI-110 016, INDIA.

Inventors : BAL KRISHAN GUPTA.

Application for Patent No. 527/Del/1984 filed on the 30th June, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 3 Claims

A leakage detector for L P Gas Equipments, Fixtures and Fittings, such as pressure regulator, hose or gas stove comprising of a body in two portions, a lower portion and an upper portion, the lower portion of the body extending

to a stub, said stub having holes extending into a central hole in said stub, the lower portion of the body also having a cylindrical extension surrounding said stub with a gap, said extension having two through slots, a connecting means passing through said slots to connect the said stub of the leakage detector to the gas cylinder, the upper portion of the body comprising a hollow tube integral with the lower portion and extending on the side opposite to said stub, the said hollow tube being in communication with said central hole of said stub, a tube, closed at one end and having a mark for suitable liquid to be filled up to the said mark, being placed inverted over the said hollow tube, a transparent tube, threaded at both ends, screwed at its lower end to said body and at its upper end to a connector adapted to be connected to said pressure regulator of said equipment, said transparent tube surrounding said inverted tube, rubber gaskets being provided at both ends of the transparent tube to make gas tight connection between said connector and said transparent tube, and between said transparent tube and said body.

Compl. Specn. 9 pages.

Drgs. 2 sheets.

CLASS : 201 D.

162256

Int. Cl. : C02 C 5/0.

## "A RESPIROMETER FOR TESTING THE BIOCHEMICAL OXYGEN DEMAND OF A WASTE WATER SAMPLE".

Applicant : THE DIRECTOR, THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY, PATIALA, INDIA, AND RAJ PAUL GARG, AN INDIAN NATIONAL C/O., THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY, PATIALA, INDIA.

Inventor : RAJ PAUL GARG.

Application for Patent No. 677/Del/84 filed on 25th August 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 7 Claims

A disposable respirometer for testing the biochemical oxygen demand of a waste water sample comprising a pouch formed from at least two membranes permeable to oxygen, the ends of said membranes held by a stiffening material, a closable mouth provided with said pouch and such that for any given pouch surface area is constant and that the volume of the contained waste water sample is constant and, whereby, the area to volume ratio is constant.

Compl. Specn. 13 pages.

Drg. 1 sheet.

CLASS : 113 B.

162257

Int. Cl. : F 23 q 1/00.

## PIEZOELECTRIC IGNITER, ESPECIALLY FOR A CIGARETTE LIGHTER OR THE LIKE.

Applicant : INTERMATCH S.A., A SWISS COMPANY, OF 5, CHEMIN DU CANAL, 1260 NYON, SWITZERLAND AND K.K. PIEMMIRKEN, A JAPANESE COMPANY, OF 1749-2 MATOGATA, HIMEJI, JAPAN.

Inventor : CHNISHI TAJI.

Application for Patent No. 710/Del/84 filed on 11th September, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 6 Claims

A piezoelectric igniter comprising :

a sleeve or housing closed at one end and formed with a pair of oppositely disposed windows in the walls thereof;

a casing engaging said sleeve internally and being axially movable with respect thereto, the walls of said casing engaging said sleeve internally being provided with oppositely disposed longitudinal slots extending to the opposite internal end of said casing;

a piezoelectric assembly disposed within said casing;

at least one compression spring provided within said sleeve;

a hammer also provided within said sleeve in tensioned engagement from said spring to bias it towards the casing;

characterised in that said sleeve has a non-circular internal cross-section and said casing which engages said sleeve internally has a complementary non-circular external cross-section, each of said cross-sections having a matching major dimension, each longitudinal slot of said casing being provided adjacent thereto at or near the internal end of said casing with a lateral notch, said hammer being formed integrally with a pair of diametrically opposite lugs which project through the windows in the walls of said sleeve, said lugs being guided in said slots and engageable in said notches, said piezoelectric assembly being impacted by said hammer upon release of said lugs from said notches by camming rotation of said hammer relative to said casing and said sleeve by an inclined edge of at least one of said windows, a further inclined edge of one of said windows camming said lugs into said notches, said major dimension of each of said cross-sections being greater than the free and spacing of said

lugs which is less than the distance between internal surfaces of said sleeve formed with said windows.

Compl. Specn. 16 pages.

Drgs. 2 sheets.

CLASS : 71 F & 131 A.

162258

Int. Cl. : E21b 7/00.

A PRODUCTION RISER FOOT FOR A SUBSEA WELL HEAD.

Applicant : SOCIETE NATIONALE ELF AQUITAINE (PRODUCTION), A FRENCH COMPANY, OF TOUR AQUITAINE, 92080, PARIS LA DEFENSE, FRANCE.

Inventors : JEAN CLAUDE SCHAWANN, JEAN PAUL CAUMONT & JEAN FALCIMAIGNE.

Applicant for Patent No. 711/Del/84 filed on 11th Sept., 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 6 Claims

A production riser foot for a subsea well head having a riser foot engaging surface which comprises :

a central tube having a connector thereon for connection to said subsea well head;

support means carried by said central tube and having a truncated collar surface radially outwardly spaced from said tube;

a guide funnel provided with an internal shoulder surface of corresponding shape to said collar surface and freely resting on said collar surface for limited axial misalignment with respect to said central tube, said funnel having a skirt with an external surface extending outwardly from said internal shoulder surface and spaced axially therefrom for centering said connector and said central tube with respect to said well head;

said truncated collar surface supporting said guide funnel at said internal shoulder surface during lowering of said well head, said truncated collar surface being separated from said internal shoulder surface after said funnel skirt is engaged with said well head for continued lowering of said central tube and said connector for making the connection with said well head.

Compl. Specn. 9 pages.

Drgs. 2 sheets.

CLASS : 68 E & I.

162259

Int. Cl. : H02j 3/00.

"APPARATUS FOR SUPPLYING AC ELECTRICAL POWER AT A PREDETERMINED VOLTAGE LEVEL TO A LOAD".

Applicant : EXIDE ELECTRONICS INTERNATIONAL CORP., A CORPORATION OF THE STATE OF DELAWARE, U.S.A., OF 3201 SPRING FORREST ROAD, RALEIGH NORTH CAROLINA 27604, U.S.A.

Inventors : WILLIAM JOHN RADDI & ROBERT WILLIAM JOHNSON.

Application for Patent No. 760/Del/84 filed on 27th September, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 2 Claims

Apparatus for supplying AC electrical power at a predetermined voltage level to a load comprising :

- (a) a battery providing a source of DC power;
- (b) a bidirectional, four-quadrant pulse width modulation inverter having a pair of DC input terminals connected with said battery and a pair of AC output terminals;
- (c) an AC power source comprising a pair of utility lines; and
- (d) transformer means connecting said inverter and said AC power source with the load, said transformer means including
  - (i) a first winding having a first number of turns connected with said inverter AC output terminals;
  - (ii) a second winding having a second number of turns inductively coupled with said first winding, said second winding being connected with the load;
  - (iii) a third winding having a third number of turns and connected with said AC power source utility lines in spaced relation relative to said first and second windings; and
  - (iv) magnetic shunts mounted between said third winding and said first and second windings for producing a series inductance between said AC power source utility lines and said first and second windings, characterised in that

the ratio R of the number of turns of said second winding to the number of turns of said third winding is 1-1 in order to rotate the phase of the inductor current in a direction more nearly into coincidence with the average direction of a phase of the current in said first winding during normal operation of the apparatus.

Compl. Specn. 32 pages.

Drgs. 5 sheets.



CLASS : 38 &amp; 116C.

162260

Int. Cl. : B65g 17/00, 17/40, &amp; F16g 15/12.

"A DRAG CHAIN CONVEYOR".

Applicant : FULLER COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 2040 AVENUE "C" P.O. BOX-2040, BETHLEHEM, PENNSYLVANIA 18001, U.S.A.

Inventor : THOMAS GFORGE KRULICK.

Application for Patent No. 841/Dcl/85 filed on 10th October, 1985.

Divisional to Patent Application No. 563/Dcl/83 filed on 18th August, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 5 Claims

A drag chain conveyor comprising : a plurality of substantially identical links pivotally connected to each other to form an endless conveyor chain; a pair of sprockets, each located at one end of the conveyor and operatively connected to said chain; one of said sprocket being a drive sprocket and the thereof said sprocket being an idler sprocket; each sprocket including a shaft and a sprocket wheel mounted on said shaft; each of said links including a cross shaped member having a first member extending in the direction of travel of the conveyor chain, a second member extending transversely at right angles to the first member for conveying material said first member having a lug at one end and enlargement at its other end with the lug of one link being pivotally connected to the enlargement of the adjacent link to thereby form the endless chain; said enlargement at said other end of the first member of each of said links having a pair of projections each extending outwardly on opposite sides of said enlargement and each having a pair of faces on opposite sides thereof; one face of the projection being selectively engaged by teeth on the sprocket wheel at one end of the conveyor and the other face of the projection being selectively engaged by teeth on the sprocket wheel at the other end of the conveyor.

Compl. Specn. 13 pages.

Drgs. 3 sheets.

CLASS : 88-D.

162261

Int. Cl. : C 01 b 2/30.

PROCESS AND PLANT FOR REMOVING METHANE AND ARGON FROM CRUDE AMMONIA SYNTHESIS GAS.

Applicant : AIR PRODUCTS AND CHEMICALS, INC., OF P. O. BOX 538, ALLENTOWN, PENNSYLVANIA 18105, UNITED STATES OF AMERICA.

Inventor : 1. BERNARD RAMSAY BLIGH.

Application No. 1471/Cal/83 filed December 12, 1983.

Convention dated 23rd December, 1982 (82 36616) and 28th April, 1983 (83 11579) both are U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 9 Claims

A process for removing methane and argon from a mixture thereof with nitrogen obtained from crude ammonia synthesis gas, which process comprises the steps of :—

- (a) cooling said crude ammonia synthesis gas in a heat exchanger; and

- (b) introducing said cooled crude ammonia synthesis gas into a distillation column wherein the cooled ammonia synthesis gas stream is separated into a purified ammonia synthesis gas stream and liquid fraction containing methane, argon and nitrogen;

characterized in that said process comprises the steps of

- (c) expanding said liquid fraction containing methane, argon and nitrogen;

- (d) introducing at least part of the liquid from step (c) into indirect heat exchange with vapour from the top of said distillation column to condense part of said vapour and provide reflux for said distillation column whilst simultaneously separating said liquid into a liquid stream rich in methane, and a gaseous stream rich in nitrogen;

- (e) warming said gaseous stream from step (d);

- (f) compressing at least part of the warmed gaseous stream from step (e);

- (g) cooling at least part of the compressed gaseous stream from step (f);

- (h) expanding at least part of the cooled gaseous stream from step (g); and

- (i) passing the expanded gaseous stream from step (h) through said heat exchanger.

Compl. Specn. 16 pages.

Drg. 1 sheet.

CLASS : 9-F.

162262

Int. Cl. : H 01 c 13/00.

ELECTRONIC MATRIX ARRAYS AND METHOD FOR MAKING THE SAME.

Applicant : ENERGY CONVERSION DEVICES, INC., OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN 48084, UNITED STATES OF AMERICA.

Inventor : 1. ROBERT ROYCE JOHNSON.

Application No. 3/Cal/84 filed January 3, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 42 Claims

An electronic matrix array comprising :

a plurality of first spaced apart address lines;

a plurality of second spaced apart address lines, said second address lines crossing at an angle from and being spaced from said first address lines and forming a plurality of crossover points therewith; and

selection means between each of said crossover points for establishing selectable current paths through respective pairs of said first and second address lines, each said selection means including a body of semiconductor material between said first and second address lines at said crossover points and having an effective current conduction cross-sectional area no larger than that formed by the overlapping juxtaposed common surface area of said address lines.

Compl. Specn. 42 pages.

Drgs. 3 sheets.

CLASS : 99-H.

162263

Int. Cl. : B 32 b 1/08, 1/10, 27/28, 27/30, 3/06, 31/08, 31/30; D 06 n 3/04, 7/00.

MULTIPLE LAYER FLEXIBLE SHEET STRUCTURE  
METHOD OF MAKING SAME AND A FLEXIBLE DIS-  
PENDING TUBE MADE OF SAME.

Applicant : AMERICAN CAN COMPANY, OF AMERI-  
CAN LANE, P. O. BOX 3610, GREENWICH CONN  
06830-3610, UNITED STATES OF AMERICA.

Inventor : 1. DWIGHT DENNIS REDDING.

Application No. 115/Cal/84 filed February 17 1984.

Appropriate office for opposition proceedings (Rule 4,  
Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A multiple layer sheet structure having two exterior  
surface layers and a plurality of interior layers comprising  
in order :

- (a) a first heat sealable layer of linear low density  
polyethylene as a first one of said exterior sur-  
faces;
- (b) a first adhesive layer of ethylene acrylic acid  
copolymer;
- (c) a layer of metal foil;
- (d) a second adhesive layer of ethylene acrylic acid  
copolymer;
- (e) a first layer of low density polyethylene or ethylene  
copolymer;
- (f) a second layer of low density polyethylene or  
ethylene copolymer;
- (g) a first polyethylene imine primer;
- (h) a layer of uniaxially oriented polypropylene, the  
orientation ratio being between 3/1 and 4/1;
- (i) a third adhesive layer of ethylene methacrylate  
and
- (j) a second heat sealable layer of low density poly-  
ethylene as the second one of said exterior sur-  
faces; said layer of uniaxially oriented poly-  
propylene being within 1.5 mils of said second  
exterior surface, there being optionally present a  
second polyacrylic acid based primer between said  
metal foil and said first adhesive layer.

Compl. Specn. 19 pages.

Drgs. 2 sheets.

CLASS : 146D<sub>1</sub>.

162264

Int. Cl. : H 01 s 3/02.

## LASER RESONANT EQUIPMENTS.

Applicant : VFB KOMBINAT FEINMECHANISCHE  
WERKE HALLE DDR-402, HALLE RUDOLF-BREITS-  
CHEID-STR. 71, GERMAN DEMOCRATIC REPUBLIC.

Inventors : 1. DR. MANTFRED POHLER, 2. DET-  
LET HENSCHLER, 3. RICHARD WITTIG.

Application No. 160/Cal/84 filed March 6, 1984.

Appropriate office for opposition proceedings (Rule 4,  
Patents Rules, 1972) Patent Office, Calcutta.

## 8 Claims

A laser resonant equipment with a folded layout and  
compensation of the maladjustments caused by ambient  
temperature changes comprising :

a double T-profile section for supporting the elements  
of the laser resonant equipment;

a first mirror support mounted on a first end of the  
double T-profile section;

a passage in the first mirror support mount for passing  
thermal carrier medium;

a reflection mirror mounted on the first mirror support;

a beam deflection prism for deflecting the laser beam  
by about 180 degree mounted to the second end of the  
double T-profile section;

a passage near the deflection prism for passing thermal  
carrier medium;

mounting provisions on the beam deflection prism for  
mounting two mirrors for reflecting the laser beam;

two reflection mirrors mounted on the mounting pro-  
visions;

support body for supporting beam decoupling optics  
mounted on the first end of the double T-profile  
section;

a passage in the support body for passing thermal  
carrier medium;

beam decoupling optics mounted on the support body;  
sensing elements responsive to the alignment status of  
the laser beam;

a control circuit fed by signals from the sensing  
elements;

a heater disposed to exchanger thermal energy with  
the thermal carrier medium and connected to the  
control circuit for regulating the temperature of the  
thermal carrier medium;

conduits for the thermal carrier medium to pass carrier  
medium to the area about the heater, to the first  
mirror support to the passage near the deflection  
prism and through the passage of the support body.

Compl. Specn. 25 pages.

Drgs. 4 sheets.

CLASS : 136-E.

162265

Int. Cl. : B 29 d 1/00.

A THIN WALLED SHAPED ARTICLE SUCH AS  
CORRUGATED BOARDS AND OTHER PROFILED  
BUILDING ELEMENTS.

Applicant : AMROTEX AG, OF SPIELHOF 14A, 8750  
GLARUS, SWITZERLAND.

Inventor : 1. PETER GMUR.

Application No. 246/Cal/84 filed April 18, 1984.

Appropriate office for opposition proceedings (Rule 4,  
Patents Rules, 1972) Patent Office, Calcutta.

## 16 Claims

A thin walled shaped article such as corrugated boards  
and other profiled building elements made of hydraulically  
set material or of a composite material bound by plastic  
materials such as herein described, or by bitumen, wherein  
the said article comprises at least one reinforcing material  
such as herein described bonded from the outside there-  
to at any area subjected to a highest critical tensile load.

Compl. Specn. 26 pages.

Drg. 1 sheet.

CLASS : 70-C<sub>5</sub>.

162266

Int. Cl. : B 01 k 3/00.

METHOD OF MAKING ANODE ASSEMBLY. THE  
STEP OF MAKING A SEALED ELECTRICAL CONNEC-  
TION BETWEEN ANODICALLY INSOLUBLE TUBU-  
LAR VALVE METAL ANODES.

Applicant : ORONZIO DE NORA S.A., VIA CATTEDRALE 4, CH 6900 LUGANO, SWITZERLAND.

Inventors : 1. GIUSEPPE BIANCHI, 2. GIANLUIGI MUSSINELLI.

Application No. 384/Cal/84 filed June 4, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 2 Claims

In a method of making anode assembly, the step of making a sealed electrical connection between anodically insoluble tubular valve metal anodes, coated on their external surface with a non-passivable and corrosion resistant material, to the corrodible core of a power supply cable insulated with a sheath of elastomeric insulating material comprising :

- disposing three bushes of ductile metal over the tubular valve metal anode one of which in a substantially central position with respect to the length of the anode and the remaining two near the two ends of the anode respectively;
- passing the power supply cable through the tubular anode until a segment of the cable, previously stripped of its insulating sheath and provided with a split collar of highly conductive metal around the conductive core of the cable and having a thickness substantially similar to the thickness of the sheath is underneath the central bush disposed over the anode;
- plastically reducing the circumference of the tubular valve metal anode in correspondence of the three externally disposed bushes by cold-heading the valve metal tubular anode respectively around the split collar disposed on the conductive core in correspondence of the central bush and directly around the elastomeric insulating sheath in corresponding of the two bushes near the two ends of the anode.

Compl. Specn. 14 pages.

Drg. 1 sheet.

CLASS : 206-E.

162267

Int. Cl. : H 03 k 19/00.

INTEGRATED CONTROL SYSTEM FOR A COMPRESSOR AND CHILLED WATER SYSTEM HAVING SAME.

Applicant : THE BABCOCK & WILCOX COMPANY, AT 1010 COMMON STREET, P. O. BOX 60035, NEW ORLEANS, LOUISIANA 70160, UNITED STATES OF AMERICA.

Inventors : 1. LARRY ENTERLINE, 2. AZMI KAYA.

Application No. 480/Cal/84 filed July 6, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 5 Claims

An integrated control system for a compressor, said compressor particularly being suitable for use in chilled water systems, for simultaneously controlling both the load output and the surge protection of the compressor comprising :

compressor control logic means for establishing a first control signal indicative of desired compressor load output;

compressor surge control logic means for establishing a second control signal indicative of required flow by pass across the compressor; and

co-ordinating control logic means for establishing a bias signal to said first control signal which bias signal is related to said second control signal.

Compl. Specn. 13 pages

Drgs. 3 sheets.

CLASS : 4.

162268

Int. Cl. : C 07 k 13/26.

METHOD FOR PRODUCING HUMAN LEUKOCYTE INTERFERON ALPHA-2.

Applicants : (1) VSESOUJNY NAUCHNO-ISSLEDOVATELSKY INSTITUT GENETIKI I SELEKTSII PROMYISLENNYKH MIKRO ORGANIZMOV (VNIIGENETIKA), OF DOROZHNYAYA ULITS, 8 MOSCOW, USSR (2) INSTITUT BIOORGANICHESKOI KHIMII IMENI M. M. SHERMYAKINA AKADEMII NAUK SSSR, OF ULITS, MIKLUKHO-MAKLAYA, 16/10, MOSCOW, USSR.

Inventors : 1. VLADIMIR GEORGIEVICH DEBABOV, 2. JURY DMITRIYEVICH TSYGANKOV, 3. ANDREI JURIEVICH CHISTOSERDOV, 4. EVGENY DAVIDOVICH SVERDLOV, 5. LARA SEMENOVNA IZOTOVA, 6. SERGEI VIKTOROVICH KOSTROV, 7. VIKTOR EMILIEVICH STERKIN, 8. VLADIMIR PAVLOVICH KUZNETSOV, 9. SERGET VASILIEVICH BELYAEV, 10. GALINA SERGEEVNA MONASTYRSKAYA, 11. IRINA SERGEEVNA SALOMATINA, 12. GRIGORY MIKHAILOVICH DOIGANOV, 13. SERGEI GAGIKOVICH ARSENIAN, 14. SERGEI ANATOLIEVICH TSARFV, 15. JURYIVANOVICH KOZLOV, 16. ALEXANDR YAKOVLEVICH STRONGIN, 17. VSEVOLODIVANOVICH OGARKOV, 18. JURY ANATOLIEVICH OVCHINNIKOV.

Application No. 509/Cal/85 filed July 9, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 3 Claims

A method for producing human leukocyte interferon alpha-2, which comprises subjecting to submerged cultivation, a producer strain *Pseudomonas* species VG-84 carrying a plasmid pVG3 with an inserted gene of human leukocyte interferon alpha-2, said strain being one deposited in the collection of microorganism cultures at the USSR Antibiotics Research Institute under Reg. No. 1742; said cultivation being carried out in a nutrient medium, containing the sources of carbon and nitrogen, mineral salts and growth stimulants, under aeration in the presence of at least one antibiotic, selected from streptomycin or tetracycline, until sufficient product has collected followed by isolation and purification of the end product in a manner known per se.

Compl. Specn. 15 pages.

Drg. 1 sheet.

CLASS : 116-D.

162269

Int. Cl. B 60 p 1/30.

A BLOCKING SYSTEM FOR USE IN SINGLE AXLE VEHICLES FITTED WITH MATERIAL HANDLING EQUIPMENT.

Applicant: USHA ATLAS HYDRAULIC EQUIPMENT LIMITED, AT 14, PRINCEP STREET, CALCUTTA-700072, WEST BENGAL, INDIA.

Inventor : 1. SRINIVASAN MAHALINGAM.

Application No. 123/Cal/86 filed February 19, 1986.

Complete specification left on 19th May, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 claims

A blocking system for use in single axle vehicles fitted with material handling equipment comprising a swing arm adapted to be pivotally mounted on the vehicle chassis to allow the former to swing on plane perpendicular to the axis of the vehicle, the pivot point of the swing arm being located vertically above the axis of the axle, one end of the

swing arm being linked to a reciprocally movable member whose to and fro movement is imparted by an actuating means, the other free end of the swing arm being adapted to engage at the end of its downward swing with a locking means fixed on a guided bolster which is adapted to be connected directly to the axle by-passing the spring leaves of vehicle.

Compl. Specn. 15 pages. Drg. 1 sheet.

CLASS 167-D.

162270

Int. Cl. B 07 b 4/00.

SCREENING DEVICE FOR GRANULAR MATERIALS SUCH AS GRAIN AND THE LIKE.

Applicant : OFFICINE RONCAGLIA S.p.A., OF VIA ARALDI 100 MODENA-ITALY.

Inventor : 1. MAURO RONCAGLIA.

Application No. 407/Cal/86 filed June 2, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 claims

A screening device for granular materials such as grain and the like, characterized in that it comprises a box-type case tapering toward the bottom end thereof accommodating valve members for controlling a waste material discharge port, and having on the interior thereof a flat screening mesh stretched on a respective frame set obliquely at a varying inclination angle, said mesh being interposed transversely to a cylindrical inlet mouth, held suspended by an air stream, for material to be screened which is formed in a wall of the case and an also cylindrical outlet port for the screened material formed in the opposing wall, there being provided a means of cleaning the top and underside of said mesh and at least one inspection door for inspecting the case interior.

Compl. Specn. 8 pages. Drg. 1 sheet.

CLASS : 172-D<sub>a</sub>.

162271

Int. Cl. D 01 b7/04.

A SILK REELING CHARKHA FOR REELING SILK.

Applicant & Inventor : DR. M.S. JOLLY, THE DIRECTOR, CENTRAL SERICULTURE RESEARCH AND TRAINING INSTITUTE, MANANDAVADI ROAD, SRIRAMPURA, MYSORE-570 008, KARNATAKA STATE, INDIAN.

Application No. 498/Mas/84 filed July 11, 1984.

Complete Specification left July 8, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

8 claims

A silk reeling charkha for reeling silk comprising a housing of three wooden pillars provided, with two bearings on which rests a first shaft carrying a flywheel at one end and a first pulley at the other end, a rectangular frame fixed on the second and the third pillar, which is provided with two 'U' block bearings to house a second and a third shaft, carrying small reels and standard reel respectively, the said pulley, being connected to a treadle, through a free wheel provided in the middle of the first shaft, said free wheel carries a cycle chain with a dead weight on it, the cycle chain connects the free wheel and the treadle, a clutch pulley or a second pulley fixed on the second shaft which carries six hexagonal small reels having a circumference of 65 cms., the first and the second pulley being connected by a belt or a cycle chain arrangement, a re-reel pulley is provided on the other side of the housing, which rotates in frictional contact, with the first pulley, the said re-reel

pulley, being mounted on one side of the third shaft, and other side of the shaft being provided with a large standard reel having a circumference of 1.5 meters and six wooden bars of 61 cms. length.

Pro. 4 pages; Drgs. nil.

Com. 10 pages; Drgs. 3 sheets.

CLASS : 40B.

162272

Int. Cl. B 01 j 11/32.

AN IMPROVED PROCESS FOR PREPARING CATALYSTS CONTAINING MIXED OXIDES OF VANADIUM AND PHOSPHORUS.

Applicant : LUMMUS CREST INC; A COMPANY ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 1515 BROAD STREET, BLOOMFIELD, NEW HERSEY 07003, UNITED STATES OF AMERICA, AND ALLUSUISSE, ITALIA S.P.A., AN ITALIAN SOCIETA PER AZIONI, OF VIA VITTOR PISANI 31, MILANO, ITALY.

Inventors : 1. GEORGE DAN SUCIU, 2. GIANCARLO STEFANI, 3. CARLO FUMAGALLI.

Application No. 587/Mas/84 filed on 8th August, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, Madras.

6 claims

In a process for preparing a catalyst comprising the mixed oxides of vanadium and phosphorus where in the phosphorus to vanadium ratio is from 1:1 to 2:1 the improvement comprising :

treating a catalyst precursor comprising a mixture of particles of the oxides of vanadium and phosphorus; in finely divided form, having an average particle size of less than 10 microns with an acid; and drying of the acid treated catalyst precursor to produce micro-spherical catalyst particles having an average particle size of from 40 to 200 microns.

Compl. Specn. 21 pages. Drg. nil.

CLASS : 13-D & 23-B, E.

162273

Int. Cl. B 65 d 5/10, 43/00.

CONTAINER WITH INTEGRAL TOGGLE CLOSURE AND A METHOD OF MANUFACTURING THE SAME.

Applicants & Inventors : THOMAS W. MCSHERRY, A CITIZEN OF U.S.A., OF 61-4, SEAVIEW AVENUE, STAMFORD, CONNECTICUT, U.S.A. AND NATHANIEL H. GARFIELD, A CITIZEN OF U.S.A., OF SUNSET LANE, HARRISON, NEW YORK, U.S.A.

Application No. 590/Mas/84 filed August 8, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

47 claims

Container provided with means for closing and opening the interior thereof with positive locking action in either position which comprises :

- (a) deformable enclosure member defining an inner containment region and at least one opening; and
- (b) closure means secured to said enclosure member for hinged movement adjacent said opening and configured and dimensioned to provide selective closing and opening of said opening, said closure means being bi-directionally movable from generally locked first position wherein said closure means positively closes said opening, through an intermediate position to generally locked second position wherein said closure means positively opens said opening, at least one dimension across said closure

means being greatest when said closure means is in its intermediate position, said at least one dimension being greater than the corresponding dimension across said opening of said enclosure member when said enclosure member is in its undeformed condition said enclosure member resiliently deformable in cooperative interaction with said closure means as said closure means moves between said first and second positions through said intermediate position so as to aid further movement of said closure means from said intermediate position to either said second position or said first position, respectively, thus positively locking said closure means in said first closed position or positively opening said closure means in said second open position, respectively.

Method for manufacturing a container provided with means for closing and opening the interior thereof with positive locking action in either position which comprises :

- (a) forming a deformable enclosure member defined an inner region and at least one opening :
- (b) providing closure means secured to said enclosure member for hinged movement adjacent said opening said closure means being configured and dimensioned to provide selective closing and opening of said opening, said closure means being bi-directionally movable from a generally locked first position wherein said closure means positively closes said opening, through an intermediate position to a generally locked second position wherein said closure means positively opens said opening, at least one dimension across said closure means being greatest when said closure means is in its intermediate position, said at least one dimension being greater than the corresponding dimension across said opening of said enclosure member when said enclosure member is in its undeformed condition such that said enclosure member resiliently deforms in cooperative interaction with said closure means as said closure means moves between said first and second positions through said intermediate position so as to aid further movement of said closure means from said intermediate position to either said second position or said first position, respectively, thus positively locking said closure means in said first closed position or positively unlocking said closure means in said open position, respectively.

Compl. Specn. 37 pages. Drgs. 5 sheets.

CLASS : 107-C.

162274

Int. Cl. F 16 j 11/04.

A METHOD OF MANUFACTURING A MILD STEEL CYLINDER LINER FOR AN INTERNAL COMBUSTION ENGINE.

Applicant : AE PLC., A BRITISH COMPANY, OF CAWSTON HOUSE, CAWSTON, RUGBY, WARWICKSHIRE CV-22 7SB, ENGLAND.

Inventor : NORMAN TOMMIS.

Application No. 678/Mas/84 filed September 5, 1984.

Convention dated 6-9-83 No. 8323844 (U.K.).

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972), Patent Office, Madras Branch.

7 claims No drawing

A method of manufacturing a mild steel cylinder liner for an internal combustion engine comprising forming a cylinder liner to a final shape from a mild steel in a manner as herein described and thereafter nitro carburising the said liner in a chamber from which air is excluded by treating the said liner with a mixture of a carburising gas such as herein described and a nitrogenous gas such as herein described in the ratio of from 25 : 75 to 75 : 25 (% by volume) at a temperature of from 500°C to 650°C to nitrocarburise the cylinder liner.

Compl. Specn. 12 pages.

CLASS 32-F.2(b)

162275

INT. CL. C 07 d 57/38

A PROCESS FOR PREPARING SUBSTITUTED 9-(1 OR 3-MONOACYLOXY OR 1,3-DIACYLOXY-2-PROPOXYMETHYL) PURINES AND PHARMACEUTICALLY ACCEPTABLE ACID ADDITION SALTS OR ALKALI METAL SALTS THEREOF

Applicant : SYNTEX (U.S.A.). INC., OF 3401, HILLVIEW AVENUE, PALO ALTO, CALIFORNIA 94304, U.S.A., A CORPORATION OF THE UNITED STATES OF AMERICA.

Inventors : (1) JULIEN PIERRE HENRI VERHEYDEN  
(2) JOHN CHARLES MARTIN

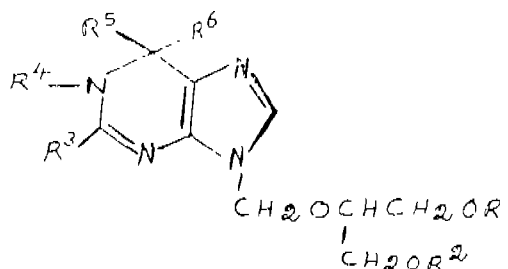
Application No. 521/Mas/85 filed July 10, 1985.

Divisional to patent No. 157856 (Ante-dated to January 31, 1983).

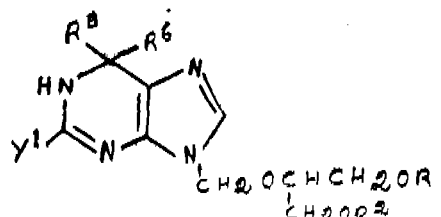
Appropriate office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

2 Claims

A process for preparing a compound of the formula I and the acid addition salts or alkali metal salts thereof



Formula-I



Formula-II

wherein :

R<sup>1</sup> is hydrogen or —C(O)R<sup>7</sup> wherein R<sup>7</sup> is hydrogen, alkyl of one to nineteen carbon atoms, hydroxyalkyl of one to eight carbon atoms, alkoxyalkyl of two to nine carbon atoms, alkenyl of two to nineteen carbon atoms, phenyl, 1-adamantyl, 2-carboxyethyl or carboxymethyl and the pharmaceutically acceptable alkali metal salts thereof :

R<sup>2</sup> is —C(O)R<sup>7</sup> wherein R<sup>7</sup> is as defined above;

R<sup>3</sup> is NR<sup>9</sup>R<sup>10</sup> wherein R<sup>9</sup> and R<sup>10</sup> are independently hydrogen or either of them is lower alkyl of one to six carbon atoms or —NHC(O)R<sup>1</sup> wherein R<sup>8</sup> is hydrogen, alkyl of one to nineteen carbon atoms or 1-adamantyl; and

A)  $R^6$  is hydrogen, halo, lower alkoxy of one to six carbon atoms, axide, thio, lower alkylthio of one to six carbon atoms,  $-NR^9R^{10}$  wherein  $R^9$  and  $R^{10}$  are as defined above or  $-NHC(O)R^8$  wherein  $R^8$  is as defined above and  $R^4$  together with  $R^5$  a single bond; or

(B)  $R^5$  together with  $R^6$  is a keto group and  $R^4$  is hydrogen which comprises; reacting a compound of formula II in which  $Y^1$  is a trityl protected amino group with glacial acetic acid to form compound of formula I wherein  $R^1$  and  $R$  are  $-C(O)R$  and optionally converting it to its acid addition salts or alkali metal salts in known manner.

(Com. —51 pages; Drawgs. —4 sheets)

CLASS : 32-F.2(b).

162276

Int. Cl. C 07 d 85/56.

A PROCESS FOR PREPARING UREA SUBSTITUTED FURAZAN COMPOUNDS.

Applicant : ENICHEM SINTESI S.p.A., AN ITALIAN COMPANY, OF VIA RUGGERO SETTIMO 55, PALERMO, ITALY.

Inventors :

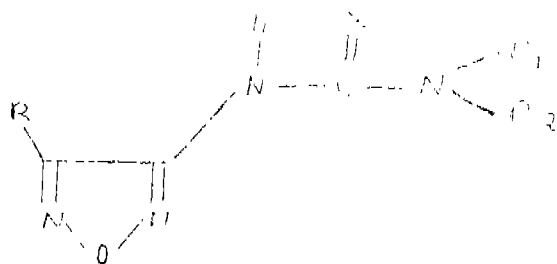
1. ROSELLA CALVINO,
2. ROBERTS FRUTTERO,
3. VITTORIO MESSORI &
4. FRANCESCO RODIO.

Application No. 623/Mas/85 filed August 12, 1985.

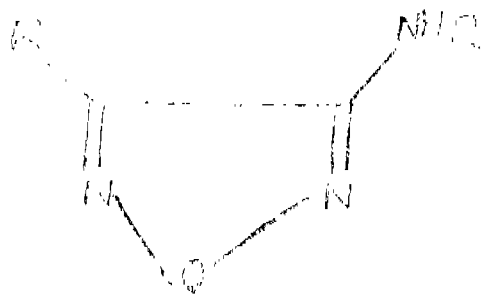
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

4 claims

A process for preparing urea substituted furazan compounds having weed-killing activity defined by the general formula (I) shown in the accompanying drawings



Formula I



Formula II

in which —X is oxygen or sulphur

—R is a linear or branched alkyl group containing from 1 to 6 carbon atoms or the phenyl group

— $R_1$  is a linear or branched alkyl group having from 1 to 4 carbon atoms, phenyl substituted with (trifluoromethyl) or with halogen atoms, naphthyl or cyclohexyl.

— $R_2$  is hydrogen

in which a 3-amine-(4-R-substituted)-furazan as shown in formula (II) of the accompanying drawings

is reacted with an isocyanate or an isothiocyanate of formula (III)

$R_1$ -CNX where

$R_1$  has the above mentioned meaning with a molar

ratio of compound (III) to compound (II) from 1/1 to 1.2/1 at a temperature from 0°C to 100°C for a time from 1 to 24 hours and the compound (I) is recovered from the reaction mixture by filtration.

Compl. Specn. 16 pages; Drgs. 1 sheet.

CLASS 32-F.2(b).

162277

INT.CL. C 07 d 8/56

A PROCESS FOR PREPARING AMIDE SUBSTITUTED FURAZAN COMPOUNDS WITH HERBICIDAL ACTIVITIES

Applicant : ENICHEM SINTESI S.p.A., OF VIA RUGGERO SETTIMO, 55 PALERMO, ITALY, AN ITALIAN COMPANY.

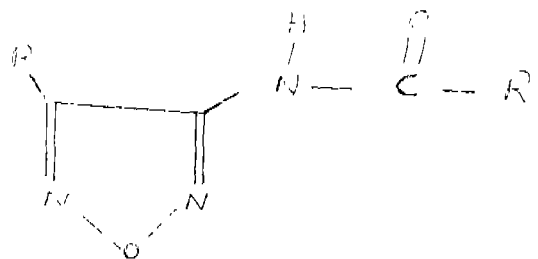
Inventors : (1) ROSELLA CALVINO (2) ROBERTS FRUTTERO (3) VITTORIO MESSORI (4) FRANCESCO RODIO

Application No. 624/Mas/85 filed August 12, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

5 Claims

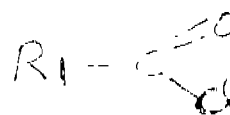
A process for preparing amide substituted furazan compounds having weed-killing activity, defined by the general formula I of the accompanying drawings,



Formula I



Formula II



Formula III

in which,

R is a linear or branched alkyl group containing from 1 to 6 carbon atoms;

$R_1$  is a linear or branched alkyl group containing from 1 to 12 carbon atoms;

—a linear or branched alkyl group containing from 1 to 12 carbon atoms substituted with one or more halogen atoms;

—a cycloalkyl group contained from 3 to 8 carbon atoms;  
 —a (methylenedioxy) alkyl ( $C_1-C_3$ ) group;  
 —a (methylenedioxy) phenyl group;  
 —a (methylenedioxy) phenyl group having one or more substituents in the ring which are selected from halogen, ( $C_1-C_4$ ) halogenalkyl group;

—the phenyl group;

—the benzyl group;

—a phenyl or benzyl group having one or more substituents, which may be identical or different from each other, selected from halogen atoms and ( $C_1-C_4$ ) alkyl, ( $C_1-C_4$ ) halogenalkyl, ( $C_1-C_4$ ) oxyalkyl and nitro groups; in which

—a 3-amino-(4-R-substituted)-furazan having the formula II of the drawings,

is reacted with an acyl chloride having the formula III of the drawings,

(where R and  $R_2$  have the abovesaid meaning), with a III to II molar ratio from 1/1 to 1, 2/1, at a temperature from  $0^\circ\text{C}$  to  $100^\circ\text{C}$ , in the presence of a basic compound blocking halogen acid and, in an inert organic solvent, for a time from 1 to 1 hours; and the compound (I) of the drawings is recovered from the reaction mixture by filtration.

(Com.—20 pages; Drawgs.—1 sheet)

CLASS 32-F.2(b).

162278

INT.CL. C 07 d 39/00

#### A PROCESS FOR THE PREPARATION OF A NEW AZABICYCLO (3.3.1) NONANE DERIVATIVE

Applicant : RICHTER GEDEON VEGYESZETI GYAR RT., A BODY CORPORATE ORGANIZED UNDER THE LAWS OF HUNGARY, OF 10-21, GYOMROL UT X. BUDAPEST, HUNGARY.

Inventors : (1) KAROLY NADOR  
 (2) GABOR KRAISS  
 (3) MARGIT PELLINISZ NEE PAROOZAY  
 (4) EGON KARPATI  
 (5) LASZLO SZPORNÝ

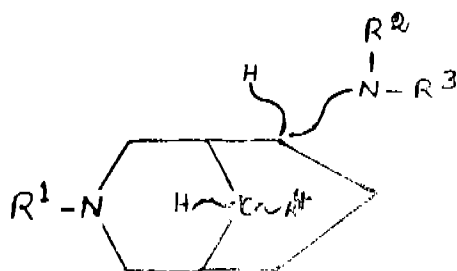
Application No. 651/Mas/85 filed August 20, 1985.

Divided out of Patent No. 897/Mas/84 filed November 20, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

#### 3 Claims

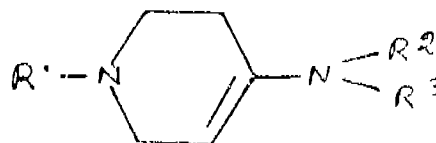
A process for the preparation of a new azabicyclo (3-3-1) nonane derivative of the general formula (I) of the accompanying drawings, wherein



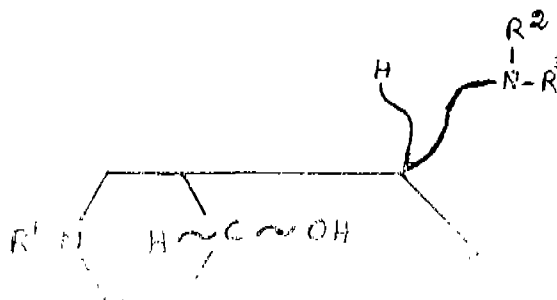
Formula I



Formula IV



Formula V



Formula VIII

$R^1$ ,  $R^2$  and  $R^3$  are  $C_1-C_4$  alkyl groups which are the same or different, or one of them is a benzyl group and the others are  $C_1-C_4$  alkyl groups,

$R^4$  is  $-OOC-R^6$ , in which

$R^6$  is a  $C_1-C_3$  alkyl or a  $C_3-C_6$  cycloalkyl group, or a phenyl or a benzyl group which optionally each can have a halo-substituent or one or more  $C_1-C_4$  alkyl,  $C_1-C_4$  alkoxy nitro, phenyl, phenoxy or trifluoro methyl substituents, or is an optionally halogenated or hydrogenated naphthyl group, or a cinnamyl group optionally substituted by a halogen atom or  $C_1-C_4$  alkoxy groups, or is a benzhydrol or 1,1-diphenyl-hydroxymethyl group, or is a heterocyclic substituent selected from the group consisting of phenyl or 9-Xanthenyl groups, and

bond means an or chemical bond,

as well as the pharmaceutically acceptable acid addition salts thereof, characterized in that,

a tetrahydropyridine derivative of the general formula (V) of the accompanying drawings

wherein  $R^1$ ,  $R^2$  and  $R^3$  are as defined above is reacted with acrolein to obtain a compound of the general formula (IV) of the accompanying drawings.

wherein  $R^1$ ,  $R^2$  and  $R^3$  are as defined above, reducing the said compound of general formula (IV) to yield an alcohol of general formula (VIII) of the accompanying drawings

wherein  $R^1$ ,  $R^2$  and  $R^3$  are as defined above, the said alcohol is reacted with a carboxylic acid derivative of the general formula  $R^6-CO-X$ , wherein  $R^6$  is as defined above and X means a halogen atom in the presence of an acid binding agent,

and if desired the obtained ester derivative of general formula (I) of the accompanying drawings is separated into its stereoisomers and/or is converted in its acid addition salts.

(Com.—46 pages; Drawgs.—1 sheet)

CLASS : 83 A<sub>2</sub>, D<sub>7</sub>.

162279

Int. Cl. A 01 j 25/00.

**A PROCESS FOR THE MANUFACTURE OF CHEESE CURD.**

Applicant : KRAFT, INCORPORATED, A CORPORATION ORGANISED UNDER THE LAWS OF DELAWARE STATES OF AMERICA, OF KRAFT COURT, 801, WAUKEGANS ROAD, GLENVIEW, ILLINOIS 60025, UNITED STATES OF AMERICA.

Inventor : JAMES WILLIAM MORAN, 2. JAMES RICHARD POSDAL & 3. GARY WILLIAM TRECKER.

Application for Patent No. 675/Mas/85 filed on 29th August 1985.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office, Madras Branch.

**7 claims**

A process for the manufacture of cheese curd from milk comprising removing moisture by known methods, salts and lactos from the milk to provide a retentate having between 50 percent and 83 percent moisture, between 0.7 percent and 2.5 percent salts, and less than 1.8 percent lactos; adding known cheese-making cultures to the retentate and fermenting the retentate to a pH of between 5.6 and 4.8 without coagulation; evaporating the moisture from the retentate under a quiescent condition to a total solids content of more than 50 percent to provide a curd; collecting the curd with minimum working of the curd, wherein a milk clotting enzyme such as herein described is added to the fermented retentate in a non-coagulating amount but in an amount sufficient to convert at least 65 percent of the kappa casein to per kappa casein after collecting.

Compl. Specn. 30 pages, No. Drgs.

CLASS : 32-F.2(b).

162280

Int. Cl. C 12 d 9/00.

**A PROCESS FOR THE PREPARATION OF GLYCOPEPTIDE ANTIBIOTICS.**

Applicant : ESKAYEF LIMITED, A COMPANY ORGANISED UNDER THE LAWS OF INDIA, OF DEVANAHALLI ROAD, OFF OLD MADRAS ROAD, BANGALORE-560 049, INDIA.

Inventors :

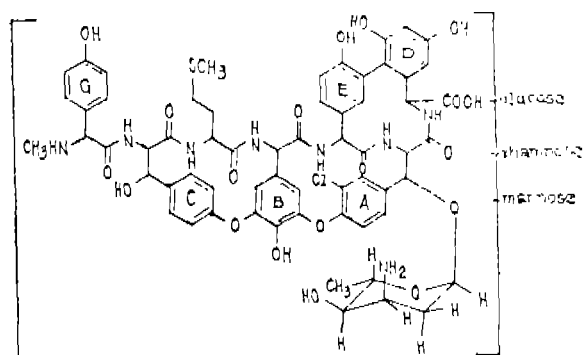
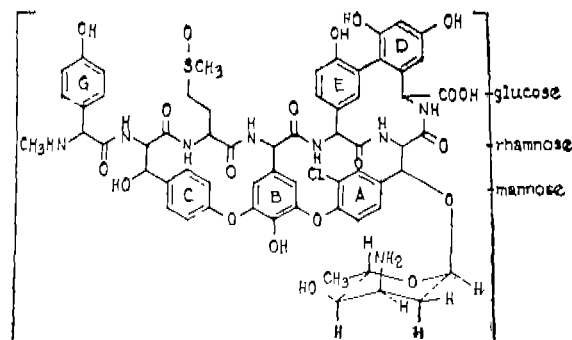
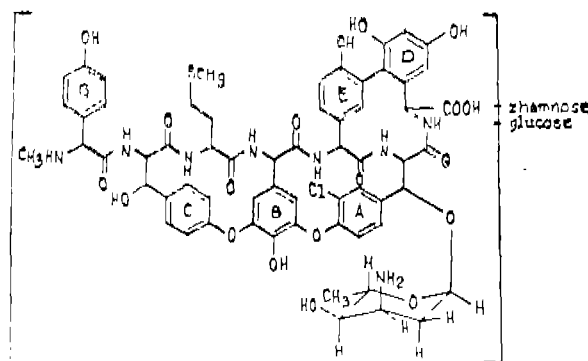
1. ASHOK K. VERMA,
2. DR. ANIL K. GOEL,
3. DR. V. ARJUNA RAO,
4. DR. AKELLA VENKATESWARLU,
5. DR. ROBERT SITRIN.

Application No. 375/Mas/86 filed May 15, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**2 claims**

A process for preparing the glycopeptide antibiotics CWI-785B, CWI-785A and CWI-785C of formulae I, II and III respectively, of the drawings which process comprises :

**Formula-I****Formula-II****Formula-III**

- (1) culturing for about 48 to about 96 hours the Actinomyces SKF-CWI785 having the identifying characteristics of ATCC 53296, or an active mutant or derivative thereof, in an aqueous nutrient medium containing; an assimilable carbon source consisting of sucrose, lactose, maltose, mannose, fructose, glucose or soluble starch or a functional equivalent thereof; an assimilable nitrogen source consisting of fish meal, peptone, soybean flour, peanut meal, cotton seed meal, or corn steep liquor or a functional equivalent thereof; and a nutrient inorganic salt capable of providing sodium, potassium, ammonium, calcium phosphate, sulfate, chloride, bromide, nitrate or carbonate, and having a pH of about 5.0 to about 9.0 at a temperature of about 150° to about 42°C, under agitation and into which sterile air is sparged; and thereafter,
- (2) clarifying the fermentation broth by filtration or centrifugation over a non-functional resin;
- (3) isolating in any known manner the CWI-785 complex therefrom; and then
- (4) separating the components by affinity chromatography and specific desorption.

Compl. Specn. 50 pages; Drgs. 2 sheets.

CLASS : 136-E, L.

162281

Int. Cl. B 29 d 23/00.

**A METHOD AND APPARATUS FOR PREPARING A TUBULAR ARTICLE.**

Applicant : METAL BOX p.l.c., A BRITISH COMPANY OF QUEENS HOUSE, FORBURY ROAD, READING, RG1, 3JH, BERKSHIRE, ENGLAND.

Inventor : DAVID WILLIAM BROOKS.

Application No. 620/Mas/84 filed August 18, 1984.

Convention date : August 19, 1983; (No. 8322360; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.



## 16 Claims

A method of producing a tubular article of polyethylene terephthalate from a tubular article of smaller dimensions having at least one open end, comprising the steps of heating the smaller tubular article to a stretching temperature above the glass transition temperature of the polymer but below its melting temperature, stretching the tubular article axially by mechanical means, and simultaneously or sequentially stretching the tubular article both axially and transversely by internal fluid pressure introduced through said open end, without external constraint and cooling the article.

Compl. Specn. 18 pages; Drgs. 4 sheets.

CLASS : 48 A2.

162282

Int. Cl. : C 18 g 11/00.

**PROCESS AND APPARATUS FOR FLUID CATALYTIC CRACKING OF A HYDROCARBON SEED.**

Applicant : MOBIL OIL CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OF 158 EAST 42ND STREET, NEW YORK, 18817, UNITED STATES OF AMERICA.

Inventors : 1. JAMES HENRY HADDAD, 2. HARTLEY OWEN AND 2. KLAUS WILHELM SCHATZ.

Application No. 633/Mas/84 filed August 23, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 19 Claims

1. A process for fluid catalytic cracking of a hydrocarbon feed which process comprises the steps of :

- (a) passing a mixture, as a suspension, of said hydrocarbon feed and a catalyst through a riser conversion zone contained within a reactor vessel and cracking said hydrocarbon feed in the riser conversion zone;
- (b) passing the mixture from the riser conversion zone to a riser cyclone separator positioned within the reactor vessel through a first enclosed conduit, said first enclosed conduit completely separating the mixture from the atmosphere of the reactor vessel;
- (c) separating at least a portion of the catalyst from the mixture in the riser cyclone separation means;
- (d) passing a gaseous effluent from the riser cyclone separator to primary cyclone separator positioned within the reactor vessel through a second conduit;
- (e) passing the separated catalyst to a catalyst stripping zone positioned within the reactor vessel, said stripping zone using a stripping gas to remove hydrocarbons entrained with the separated catalyst;
- (f) passing at least a portion of stripping gas from the catalyst stripping zone directly into a first annular part in the second conduit;
- (g) passing cracked hydrocarbons, as an effluent from said primary cyclone separator, to downstream fractionation apparatus; and
- (h) passing the separated catalyst from said stripping zone to a regeneration vessel for regeneration.

Compl. Specn. 23 pages; Drgs. 3 sheets.  
37 GI/88

CLASS : 127 A.

162283

Int. Cl. : F 16 d 13/00, 13/75.

**IMPROVED SELF ADJUSTING DEVICE TO COMPENSATE WEAR ON FRICTION SURFACES OF A CLUTCH**

Applicant : DANA CORPORATION, 4500 DORR STREET, TOLEDO, OHIO, U.S.A. A CORPORATION OF THE STATE OF VIRGINIA, U.S.A.

Inventor : WILLIAM M. TENNANT, RICHARD A. FLOTOW.

Application No. 697/Mas/84 filed 13 September 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 7 Claims

A self adjusting device adapted to engage an actuating means and a movable adjusting means in a friction clutch so as to compensate for wear on friction surfaces of the clutch, the device comprising :

a mounting bracket adapted to be secured to the clutch, said mounting bracket including a central U-shaped portion and a flange portion formed at the end of each of the legs of said central U-shaped portion;

first and second rotatable hub members rotatably supported by said legs of said central U-shaped portion and a lost motion coupling connection therebetween;

means connected to the actuating means for rotating said first hub member upon being actuated; and

means formed on said second hub member and connected to the adjusting means for moving the adjusting means so as to compensate for wear on the friction surfaces of the clutch, said means for rotating said first hub member being actuated upon movement of said actuating means to rotate said first hub member and, through said lost motion coupling connection, to actuate said second hub member for causing said means formed on said second hub member to move said adjusting means.

Compl. Specn. 11 pages. Drg. 1 sheet.

CLASS : 94C, G.

162284

Int. Cl. : B 02 c 9/00.

**IMPROVEMENTS IN OR RELATING TO WET GRINDERS.**

Applicant & Inventor : SENGALIPALAYAM DASA NAIDU RANGASWAMY, NO. 24 SENGALIPALAYAM N.G.O. COLONY POST, COIMBATORE 641022, TAMIL NADU, INDIA, INDIAN NATIONAL.

Application No. 717/Mas/84 filed 19 Sep 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 5 Claims

An improved wet grinder comprising a rotatably mounted flat-surface base stone surrounded by a casing and driven by a prime mover; a grinding stone resting on the base stone, characterised in that the grinding stone is substantially conical or frusto-conical in shape and rests on the base stone with its lateral surface in contact therewith, the said grinding stone being rotatably mounted and pivotably supported on a shaft provided with at least one bearing, the shaft being enclosed in a housing pivoted to a support, whereby the grinding stone rotates in contact with the base stone and is also manually liftable above, and out of contact with, the said base stone.

Compl. Specn. 6 pages; Drg. 1 sheet.

CLASS : 83 B 5.

162285

7 Claims

Int. Cl. : F 25 d 7/00.

A DEVICE FOR ENHANCING THE PRESERVATION PERIOD OF SUBSTANCES KEPT IN REFRIGERATORS AND FOR PREVENTING THE SPREAD OF ODOURS THEREIN.

Application for the Patent No. 733/Mas/84 filed on 25th BHARADWAJ, 44(28) CUTCHERY ROAD, MYLAPORE, MADRAS-600 004, TAMIL NADU, INDIA, INDIAN NATIONAL.

Application for the Patent No. 733/Mas/84 filed on 25th September 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 6 Claims

A device for enhancing the preservation period of substances kept in refrigerators and for preventing the spread of odours therein comprising a perforated capsule the wall of which is at least partly coated with a paste made of water and lime treated with sodium vapour, the interior of the capsule housing a pouch made out of an air permeable material, the pouch containing a mixture of activated carbon and activated silica gel, the capsule being provided with at least one opening for introduction and withdrawal of the pouch and also with a lid for closing the opening.

Compl. Specn. 6 pages, Drg 1 sheet.

CLASS : 172 B.

162286

Int. Cl. : G 07 c 3/14.

AN APPARATUS FOR MAKING QUALITY YARN ON A TEXTILE MACHINE.

Applicant : ZELLWEGER USTER LTD., OF WILSTRASSE 11, CH-8610 USTER, SWITZERLAND, A SWISS COMPANY.

Inventor : PETER. F. AEMMER.

Application 741/Mas/84 filed 28 September, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 3 Claims

An apparatus for making quality yarn on a textile machine, comprising a plurality of similar monitoring stations a plurality of measurement devices each of them being associated with monitoring station, and processors for the processing of the signals delivered by the measurement devices; characterised in that a common central apparatus (51) being associated with the processors (53) and being connected with the latter via a communication channel (80), each processor being associated with a plurality of measurement devices and having a multiplexer (61) controlled led by a clock (59) for the cyclical scanning of the output signals of the measurement devices associated with this processor.

Compl. Specn. 16 pages, Drgs. 4 sheets.

CLASS : 48 A1.

162287

Int. Cl. : H 81 b 7/18.

MULTILAYER METAL/ORGANIC POLYMER LAMINATE STRUCTURE SUITABLE FOR USE AS A CABLE SHIELDING OR ARMORING TAPE.

Applicant : THE DOW CHEMICAL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, OF 2838 DOW CENTRE, ABBOTT ROAD, MIDLAND, MICHIGAN-48648, U.S.A.

Inventor : RICHARD H. BREZINSKY.

Application No. 778/Mas/84 filed October 15, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

A multilayer metal/organic polymer laminate structure, the structure comprising :

- a stainless steel substrate layer having first and second major planar surfaces and having a thickness of from 8.8254 to 8.76 mm;
- first and second chromium metal layers adhered respectively to the first and second major planar surfaces of the substrate layer without the use of an intermediate adhesive layer, the chromium metal of from 21.5 to 516 milligrams per square meter of layer surface area;
- first and second chromium oxide layers adhered respectively to the first and second chromium metal layers without use of an intermediate adhesive layer, said chromium oxide layers having a thickness of from 2.69 to 53.76 mg of chromium metal as chromium oxide per square metre of layer surface area, the said first and second chromium metal layers and the said first and second chromium oxide layers being electroplated onto the stainless steel substrate in a manner known per se; and
- at least one adhesive polymer film layer, having a thickness of from 8.8825 to 8.51 mm and formed from a normally solid thermoplastic polymer of ethylene modified by one or more monomers having reactive carboxylic acid groups, adhered without use of an intermediate adhesive, to the first or second chromium oxide layer or to both chromium oxide layers.

Compl. Specn. 34 pages, Drgs. 2 sheets.

CLASS : 85 K.

162288

Int. Cl. : (4) F 27 B 15/0.

FLUIDIZED-BED SOLID-FUEL COMBUSTION FURNACE.

Applicant : CHARBONNAGES DE FRANCE (ESTABLISSEMENT PUBLIC) OF 9, AVENUE PERCIER, 75008 PARIS, FRANCE, AND INSTITUT FRANCAIS DU PETROLE, OF 4, AVENUE DE BOIS PREAU, HAUTS-DE-SEINE 92502 RUEFT, MATMAISON FRANCE, BOTH FRENCH STATE OWNED COMPANIES.

Inventors :

1. ROGER PUFF.
2. JACQUES DREUILHE,
3. JEAN-CLAUDE KITA &
4. JEAN FRANCOIS LARGE.

Application for Patent No. 928/Mas/84 filed on 28th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

## 9 Claims

Fluidized bed solid-fuel combustion furnace which is defined by a side wall surrounding a central area and a fluidization grate and in which the fluidized bed has a lower level corresponding to the lowest output of the furnace and an upper level corresponding to the highest output of furnace, the said combustion furnace containing a tubular heat exchanger, characterised in that the tubes of the heat exchanger extend vertically at least between the lower level and the upper level while air injectors are arranged above the upper level in the vicinity of the sidewall and are directed towards the central area of the furnace with an inclination relative to the vertical at an angle lying between 15° and 75° and with a total flow rate constituting between 5% and 20% of the total flow rate of air introduced into the furnace.

Compl. Specn. 11 pages, Drg. 1 sheet.

CLASS : 32F 2(b)

162289

Int. Cl. : C 07 d 57/38.

A PROCESS FOR THE PREPARATION OF SUBSTITUTED 9—(1, 3—DIACYLOXY-2-PROPOXYMETHYL) PURINES AND PHARMACEUTICALLY ACCEPTABLE ACID ADDITION SALTS THEREOF.

Applicant : SYNTEX (U.S.A.) Inc., of 3401 HILLVIEW AVENUE PALO ALTO, CALIFORNIA 94304, U.S.A., A CORPORATION OF THE UNITED STATES OF AMERICA.

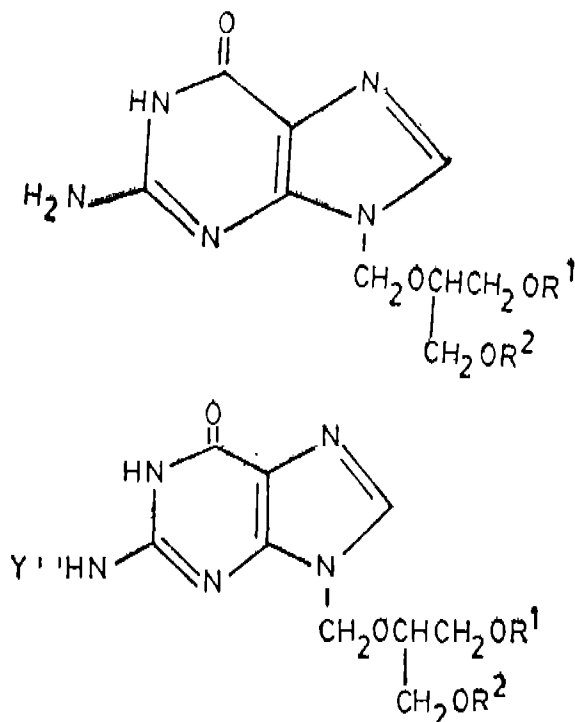
Inventors : 1. JULIEN PIERRE HENRI VERHEYDEN, 2. JOHN CHARLES MARTIN.

Application No. 522/Mas/1985 filed July 10, 1985.

Divisional to Patent No. 157856 (Ante-dated to 31-1-83).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

1 Claim



Formula-Ia

A process for preparing a compound of the formula Ia and the acid addition salts, preferably the pharmaceutically acceptable acid addition salts thereof, wherein  $R^1$  is  $-C(O)R^7$  wherein  $R^7$  is hydrogen, alkyl of one to nineteen carbon atoms, hydroxyalkyl of one to eight carbon atoms, alkoxyalkyl of two to nine carbon atoms, alkenyl of two to nineteen carbon atoms, phenyl, 1-adamantyl, 2-carboxyethyl or carboxymethyl and the pharmaceutically acceptable alkali metal salts thereof.

$R^2$  is  $-C(O)R^7$  wherein  $R^7$  is as defined above; which comprises reacting a compound of formula I(b) with an alcoholic solution of a base wherein  $Y''$  is an acetyl protecting group to form compounds of formula (Ia) wherein  $R^1$  and  $R^2$  are  $-C(O)R^7$ ; and optionally converting the compound of formula Ia to its acid addition salts or to its alkali metal salts in a known manner.

(Com.—50 pages; Drawgs. —4 sheets)

CLASS 32-F.2(b)

162290

Int. Cl. : C 07 d 87/54

PROCESS FOR THE PREPARATION OF AROMATIC-1, 4-OXAZEPINONES AND ITS DERIVATIVES.

Applicant : A.H. ROBINS COMPANY, INCORPORATED, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF VIRGINIA, OF 1405, CUMMINGS DRIVE, RICHMOND, VIRGINIA 23261-6609, UNITED STATES OF AMERICA.

Inventors : (1) YOUNG SEK LO

(2) ALBERT DUNCAN CALE

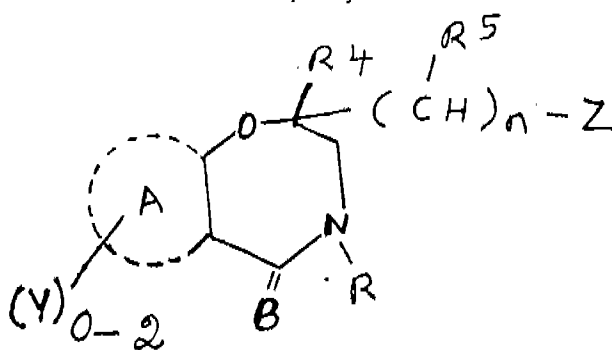
Application No. 680/Mas/85 filed August 30, 1985

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

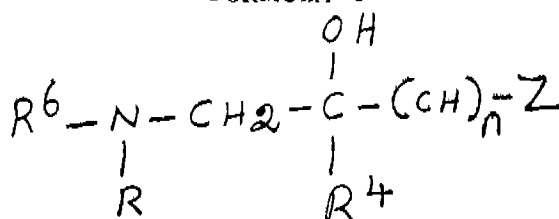
7 Claims

A process for the preparation of a compound of the formula I of the drawings and its derivatives.

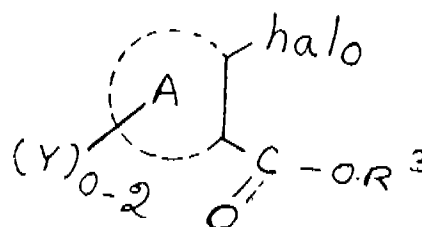
680/Mas/85



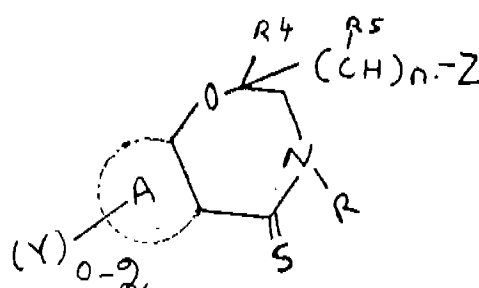
FORMULA—I



FORMULA—IV



FORMULA—V



FORMULA—Ib

wherein;

A represents an aromatic ring having two of its carbon atoms held mutually with the oxazepine moiety selected from the group consisting of benzene, naphthalene, quinoline or

pyridine, any of the rings optionally substituted by one or two Y radicals selected from the group consisting of halo, loweralkyl, loweralkoxy, diloweralkylamino, nitro or trifluoromethyl;

B is selected from oxygen or sulfur;

R is selected from the group consisting of hydrogen, loweralkyl, cycloalkyl or phenyl-loweralkyl of which phenyl may be optionally substituted by one or two radicals selected from halo, loweralkyl, loweralkoxy, nitro or trifluoromethyl;

n is 1, 2 or 3;

R<sup>4</sup> and R<sup>5</sup> are selected from hydrogen or loweralkyl (1-5 C);

Z is selected from the group consisting of —NR<sup>1</sup> R<sup>2</sup>, 1H-pyrazol-1-yl, 1H-imidazol-1-yl, 1H-imidazol-2-yl or 4, 5-dihydro-1H-imidazol-2-yl;

R<sup>1</sup> and R<sup>2</sup> are selected from the group consisting of loweralkyl, cycloalkyl, and phenyl-loweralkyl of which phenyl may be optionally substituted by 1 or 2 radicals selected from halo, loweralkyl, loweralkoxy, nitro, trifluoromethyl or cyano, or R<sup>1</sup> and R<sup>2</sup> taken together with the adjacent nitrogen atom may form a heterocyclic residue selected from the group consisting of 1-azetidinyl, 1-pyrrolidinyl, 2, 5-dimethyl-pyrrolidin-1-yl, Z-methylpyrrolidin-1-yl, 1-piperidinyl, 4-substituted-piperidin-1-yl, 4-[bis (4-fluorophenyl) methyl]-piperidin-1-yl, 4-morpholinyl, 1-piperazinyl, 4-substituted-piperazin-1-yl, 1, 2, 3, 6-tetra-hydropyridin-1-yl, 2, 5-hydro-1H-pyrrol-1-yl, or 1H-pyrrol-1-yl, and the pharmaceutically acceptable acid addition salts thereof, which comprises reacting an alkanolamine compound of formula IV of the drawings

wherein Z, R, R<sup>4</sup>, R<sup>5</sup> and n are as defined above and R<sup>6</sup> is hydrogen or an amine protecting group with a strong alkali-metal non-nucleophilic base and reacting the product thereof with an aromatic compound of the formula V of the drawings

wherein A represents an aromatic ring selected from benzene, naphthalene, pyridine or quinoline, any of the rings optionally substituted by one or two radicals selected from halo, loweralkyl, loweralkoxy, diloweralkylamino, nitro or trifluoromethyl, and R<sup>3</sup> is selected from hydrogen, or an esterifying group, cyclizing the prepared compound in a known manner to give a compound of the formula I of the drawings, if desired, reacting the prepared compound with sulfurizing agent to give a compound of the formula Ib of the drawings.

wherein Y, Z, A, R, R<sup>4</sup>, R<sup>5</sup> and n have the starting values.

(Com.—29 pages; Drawgs.—5 sheets)

CLASS : 156 D.E.

162291

Int. Cl. : B67d 5/40 & F04b 49/00.

PUMP.

Applicant : M & T CHEMICALS INC., OF ONE WOODBRIDGE CENTER, WOODBRIDGE, NEW JERSEY 07095, UNITED STATES OF AMERICA, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A.

Inventor : ROGER THACKSTON GUTHRIE.

Application for Patent No. 795/Del/84 filed on 12th Oct., 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

4 Claims

A pump for completely containing and precisely metering uniform pulses of small quantities of a hazardous and reactive fluid comprising :

a unitary piston housing having interior cylindrical walls, said piston housing having an elongated bore extending from a first open end to a position proximate a second closed end, said elongated bore having a pumping chamber region at said second end;

a pumping fluid inlet means connected to said pumping chamber,

a pumping fluid outlet means connected to said pumping chamber,

a reciprocating and rotating piston, said piston being positioned in a uniform mating relationship with the interior walls of said piston housing with a close tolerance therebetween during said pumping cycle for reciprocating motion within said elongated bore of said piston housing from a first position in which said piston substantially occupies the space within said pumping chamber and displaces pumped fluid from said chamber to a second position in which said piston is substantially removed from said pumping chamber and draws pumping fluid into said chamber, characterised in that

a barrier fluid inlet for providing communication between a source of barrier fluid and said elongated bore at a position which is between said elongated bore first end and said pumping chamber and adjacent said piston,

Pressure means for delivering said barrier fluid directly to said elongated bore at a pressure which is greater than the maximum fluid pressure within said pumping chamber preferably about 20 psi;

whereby moist air is prevented from leaking into said piston and when pumping fluid is drawn into said chamber, and migration of pumped fluid from said pumping chamber along the piston to said first open end is precluded by said barrier fluids.

(Complete Specification 17 Pages

Drawing 3 Sheets)

CLASS : 150 G & H.

162292

Int. Cl. : F161 7/00.

"PIPE SUPPORTS"

Applicant : ANTHONY JOHN SALTER AND YVONNE DIANE SALTER, BOTH BRITISH SUBJECT OF CHERRY TREES, THE RIDGEWAY, SEDGLEY, DUDLEY, WEST MIDLANDS, DY3 1BS, ENGLAND.

Inventor : ANTHONY JOHN SALTER.

Application for patent no. 847/Del/84 filed on 31st Oct., 1984.

Convention date 5th November, 1983/8328632/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

16 Claims

A pipe support comprising a body, spring means located in the body, a piston in the body, said spring means acting on said piston which is axially movable relative to the body, carrier means connected to the piston and engageable with a pipe to be supported, and locking means operative between the body and the piston to restrain movement of the piston relative to the body having a slot inclined with respect to the direction of movement of the piston, the piston also having a slot adjacent to and oppositely inclined to the slot of the body such that portions of the slots register within the range of axial movement of the piston, and the locking means comprising clamping members which are interconnected through the registering portions of the slots for clamping the piston to the body and are releasable to allow the piston to move relative to the body.

(Complete Specification 18 pages.

Drawing 2 sheets)

CLASS : 13 A.

162293

Int. Cl. : B31b 41/00; 49/00.

**APPARATUS FOR THE PRODUCTION OF SACHETS WITH RIGIDIFYING HANDLES.**

Applicant : SOCIETE GENERALE DES EAUX MINÉRALES DE VITTEL, a French company, of 8800 Vittel, France.

Inventors : RAOUL GAUTIER & MICHEL CAZES.

Application for Patent No. 862/Del/84 filed on 14th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

**3 Claims**

Apparatus for production of sachets with rigidifying handles, comprising a vertical-travel shaping and packaging machine having a mandrel around which a continuous sheet of flexible synthetic material is passed and continuously formed into a tubular sleeve prior to forming said sleeve into sachets, an arm for feeding and affixing a said rigidifying handle to said tubular sleeve, said arm rotatable about a vertical axis between a magazine containing a store of said rigidifying handles and said mandrel, said arm having a suction cup mounted thereon so as to be translationally movable along a longitudinal axis of said arm, said suction cup picking up a said rigidifying handle from said store and on rotation of said arm placing said rigidifying handle against said tubular sleeve on said mandrel, welding means also mounted on said arm, said welding means being translationally movable on said arm for welding said handle to said tubular sleeve.

(Complete Specification 13 Pages. Drawing 3 Sheets)

CLASS : 176F &amp; I.

162294

Int. Cl. : F22b 31/00.

**A DEVICE FOR SUSPENDING A BUNDLE OF HORIZONTAL TUBES IN A VERTICAL PLANE.**

Applicant : STEIN INDUSTRIE, A FRENCH BODY CORPORATED, OF 19-21, AVENUE MORANE SAULNIER, 78140 VELIZY-VILLACOUBLAY, FRANCE.

Inventors : JEAN FOURNIER & HENRI PATRON.

Application for Patent No. 863/Del/84 filed on 14th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

**4 claims**

A device for suspending a bundle of horizontal tubes in a vertical plane, the device comprising pairs of vertical tubes provided with half-fins on their facing sides, wherein the half-fins have a profile including notches of circular shape, having a radius slightly larger than the radius of the tubes in the bundle and being at the same spacing as said tubes the notches being separated by tongues which project from the vertical tubes by a distance which is long enough to provide good support for the tubes of the bundle and which is short enough to ensure good thermal conduction from their projecting ends to their weld zones on the corresponding vertical tubes.

Compl. Specn. 6 pages. Drgs. 2 sheets.

CLASS : 85K.

162295

Int. Cl. F 23n 3/00.

**APPARATUS FOR COMBUSTION OF FLUIDAL FUELS.**

Applicant : ASEA STAL AB, A SWEDISH CORPORATION, OF FINSPONG SLOTT, S-612 20 FINSPONG, SWEDEN.

Inventors : MATS OLSSON & RONALD SANDSTROM.

Application for patent No. 885/Del/84 filed on 22nd November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

**3 claims**

Apparatus for combustion of fluidal fuels, said combustion apparatus comprising a sound generator, one end of a tubular resonator being connected to the feeder of said generator, said generator being adapted for a reciprocating movement in response to the combustion air and the fuel particles entrained therein, said generator having a maximum frequency of the fundamental tone being 60 Hz, characterised in that (a) the generator is of quarter wave type, a diffuser is provided at the other end of the resonator, said diffuser having an annular outlet; (b) a lance extends into the resonator along the axis of the diffuser for supplying fluidal fuels to be burnt to the interior of said diffuser, said lance being movable along the axis of said diffuser

Compl Specn 9 pages; Drgs 2 sheets

CLASS : 85 K

162296

Int Cl. F 23n 3/00.

**APPARATUS FOR THE COMBUSTION OF LARGE PARTICLES OF SOLID FUEL CONTAINED IN A FUEL BED.**

Applicant : ASEA STAL AB, A SWEDISH CORPORATION, OF FINSPONG SLOTT, S-612 20 FINSPONG, SWEDEN.

Inventors: MATS OLSSON & RONALD SANDSTROM.

Application for Patent No. 886/Del/84 filed on 22nd November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

**4 claims**

Apparatus for the combustion of large particles of solid fuel contained in a fuel bed which comprises a grate on one surface of which said fuel bed is positionable, said grate being connected with a low frequency sound generator and being provided with means for the supply of combustion air thereto to enable said large particles of fuel in said fuel bed to combust and produce combustion gas characterised in that said low frequency sound generator is a tubular resonator having a maximum frequency of 60 Hz, connected to the opposite surface of said grate, the fuel bed on the first surface of said grate lying within a combustion chamber to which said generator is connected, the area of the grate exposed to the said generator in a plane transverse to the major axis of the generator being less than half the wavelength of the sound generated, whereby said low frequency sound provides a high velocity of reciprocating movement of combustion air and combustion gas through the fuel on said grate in a direction perpendicular to the plane of the area of said grate exposed to said generator.

Compl. Specn. 15 pages. Drgs. 3 sheets

CLASS : 129 D &amp; N.

162297

Int. Cl. B23K 35/36, 35/363.

A PROCESS FOR THE PREPARATION OF A NON-CORROSIVE FLUX FOR SOFT SOLDERING OF COPPER AND COPPER BASED ALLOYS.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : INDER SINGH, DEVENDRA DEO NARAIN SINGH & MIHIR KUMAR BANERJEE.

Application for Patent No. 927/Del/84 filed on 10th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

## 4 claims

A process for the preparation of a non-corrosive flux for soft soldering of copper and copper based alloys which comprises adding an organic-amino compound having the formula  $C_x H_y H_z$ , where x is 6 to 16 y is 14 to 20 and z is 1 to 2 with dilute hydrochloric acid at room temperature and thereafter adding to the resultant solution an organic compound of the formula  $C_n H_m O_p S_q Na$  where n is 8 to 12, m is 5 to 10 p is 2 to 5 and q is 1-3 with stirring and filtering the product so formed, it required.

Compl. Specn. 6 pages.

CLASS : 156 D &amp; 135.

162298

Int. Cl. F04c 3/00.

## TOROIDAL MOTOR OR PUMP.

Applicant & Inventor : JEICHIEUNUS ADRIAAN VAN DER WERFF, OF ONDER DE BOOMPJES "QUO VADIS" 3417 ZG MONTFOORT, THE NETHERLANDS, A DUTCH CITIZEN.

Application for Patent No. 16/Del/85 filed on 11th January, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

## 3 claims

Toroidal motor or pump comprising : a casing consisting of two halves and defining a toroidal passage therein; a disc rotor rotatably carried in said casing and extending into said toroidal passage; a plurality of vanes carried on shafts radially rotatably mounted on said rotor, said vanes capable of sealing off the toroidal passage; rockers secured to the vane shafts and which during rotation of said disc rotor are carried between a pair of curved discs located between said casing halves; said toroidal passage including a narrowed section having the shape of the cross-section of the disc rotor and through which the vanes when in a first position are able to pass; an inlet and an outlet port for a pressure medium extending through said casing and positioned in a section of said casing wherein the vanes are rotatable to a second position; characterised in said curved discs being spaced from each other to define a cylindrical cam having a first curved track and a second curved track along which the rockers are carried; said rockers including a central cam follower and two side cam followers shaped so that the rockers are able to move through spaces in the disc rotor, said side cam followers engaging said first curved track and said central cam follower engaging said second curved track for pivoting said vanes within said toroidal passage, said vanes pivoting between a sealed position wherein at least one of said vanes is substantially vertical and closes said toroidal passage and an open position wherein said vane lies in the plane of the disc rotor.

Compl. Specn. 13 pages. Drgs. 3 sheets.

CLASS : 28 B, C &amp; 85 K.

162299

Int. Cl. F23d 1/00.

## BOILER.

THE BABCOCK & WILCOX COMPANY, OR 1010 COMMON STREET, P.O. BOX 60035, NEW ORLEANS, LOUISIANA 70160, UNITED STATES OF AMERICA, A CORPORATION UNDER THE LAWS OF THE STATE OF DELAWARE.

Inventors : GERALD DURFEE LINDSTROM, CLIFFORD FRANKLIN ECKHART, GEORGE ALBERT FARTHING, JAMES JAY MUCKLEY & BRAIN ADWARD TAYLOR.

Application for Patent No. 238/Del/85 filed on 21st March 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

## 4 claims

A boiler having wall means (12) separating a windbox (40) from a furnace chamber (50), the wall means (12) having a frustoconical burner port (15) outwardly tapering therethrough from the windbox (40) to the furnace chamber (50), said boiler capable of burning a concentrated coal-water slurry fuel composed of at least sixty-five weight percent of pulverized coal and comprises a coal-water fuel atomizer (14) concentric within the burner port (15) and fuel supply means (8, 9, 13) including a burner barrel (13) within the windbox (40) connected with the atomizer (14), an outer cylindrical casing (10) concentric with and radially spaced from the fuel supply means (8, 9, 13) and having one end mounted to the wall means (12) on the windbox side, a cylindrical sleeve (25) surrounding and radially spaced from the fuel supply means (8, 9, 13) to define an inner annulus (21) therebetween, said sleeve (25) having an end opening within the casing (10) proximate to and axially spaced from the burner port (15), the sleeve (25) including means (26) for passing air therethrough to the inner annulus (21) from the windbox (40), a cylindrical housing (20) concentrically mounted about at least part of the sleeve (25) intermediate and radially spaced from the sleeve (25) and the casing (10) to define an outer annulus (23) between the housing (20) and the casing (10), the cylindrical housing (20) having a first end open proximate to and axially spaced from the burner port (12), a second and radially spaced remote from the burner port and a plate (42) closing the second end, the casing (10) having a series of openings at circumferentially-spaced intervals in its periphery radially aligned with the housing to supply air from the windbox (40) to the outer annulus (23), and characterised in that a plurality of curvilinear vanes (30) are provided, each of said vanes being movably mounted in a respective one of the openings to regulate air passage therethrough, each of the vanes (30) having an offset end (31) circumferentially overlapping and radially spaced from an opposite end of an adjacent one of the vanes (30).

Compl. Specn. 14 pages. Drgs. 2 sheets.

CLASS : 145E<sub>2</sub> & 1

Int. Cl. D21d 5/00.

A PROCESS FOR THE PREPARATION OF SEMICHEMICAL PULP FOR PRODUCTION OF PAPER FROM COTTON PLANT STALKS.

Applicant : THE INDIAN COUNCIL OF AGRICULTURAL RESEARCH, KRISHI BHAVAN, NEW DELHI-110001, INDIA, HEREAFTER REFERRED TO AS I.C.A.R. A SOCIETY REGISTERED IN INDIA UNDER SOCIETIES REGISTRATION ACT 1860 (21 OF 1860).

Inventors : SHRI NATH PANDEY & ABDUL JABBAR SHEIKH.

Application for Patent No. 168/Del/85 filed on 27th February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

## 7 claims

A process for preparation of semi-chemical pulp from cotton plant stalk by a modified chemi-thermo-mechanical process using 5% to 15% of sodium hydroxide and 5% sodium hydroxide plus 5% sodium sulfite, as  $\text{Na}_2\text{S}_2\text{O}_3$  on the oven dry weight of the raw material in a rotary bomb digester, at a material to liquor ratio of 1:3, soaking the material in chemicals at elevated temp. of  $110^\circ\text{C}$  temp. and  $3.5 \text{ kg/cm}^2$  pressure for 20 min. to facilitate better penetration of chemicals and for softening of lignin thereby causing weakening of bondages between the fibres, which otherwise was very difficult to achieve, followed by further digestion at a  $130^\circ\text{C}$  temp. and  $4.5 \text{ kg/cm}^2$  pressure for 110 min. removing the black liquor, refining the cooked material in a disc refiner in two pass (15+10 thou), screening of the pulp, beating the pulp in a valley beater followed by bleaching using hypochlorite in two stages at  $45^\circ\text{C}$  temp. 5% consistency for two hours.

Compl. Specn. 10 pages.

## OPPOSITION PROCEEDINGS

The application for Patent No. 160471 made by M/s. Warner-Lambert Company, in respect of which opposition was entered by M/s. Confectionary & Pharma Limited as notified in Gazette of India, Part III Section 2 dated 5th March 1988 has been abandoned and no patent shall be sealed.

## OPPOSITION PROCEEDINGS

The application for Patent No. 160462 made by M/s. Warner-Lambert Company, in respect of which opposition was entered by M/s. Kushal Confectionary & Pharma Limited as notified in Gazette of India Part III Section 2 dated 6th February, 1988 has been abandoned and no patent shall be sealed.

## PRINTED SPECIFICATION PUBLISHED

A limited number of printed copies of the undernoted specifications are available for sale from the Patent Office Calcutta and its branches at Bombay, Madras and New Delhi at rupees per copy :—

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## PATENTS SEALED

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## AMENDMENT PROCEEDINGS UNDER SECTION 57

Notice is hereby given that JBL Incorporated, of 8500 Balbo Boulevard, Northridge, California 91329, a Corporation organised and existing under the laws of the state of Delaware, United States of America have made an application under Section 57 of the Patents Act, 1970 for amendment, of specification of their application for Patent No. 161076 for "Defined coverage loudspeaker horn". The amendments are by way of correction. The application for amendment and the proposed amendments can be inspected free of charge at Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall left within one month from the date of filing the said notice.

## COMMERCIAL WORKING OF PATENTED INVENTIONS

## CHEMICAL LIST—IV

The following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by Patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of calendar year 1986 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	1	3	4
145378	4-5-1977	American Cyanamid Company, Wayne, New Jersey U.S.A.	Novel Method for dinitrosation of organic nitrosamines.
150908	20-9-1978	Do.	A process for preparing a melt spun acrylonitrile polymer fiber.
152486	19-6-1979	Do.	Melt-spinning acrylonitrile polymer fiber from low molecular weight polymer and acrylonitrile polymer fiber so prepared.
153347	11-3-1981	Do.	An improved process for the manufacture of alumina from alumina ores.
153523	1-6-1981	Do.	Process for preparing substituted imidazolyl nicotine acids, esters and salts and use thereof as herbicidal agents.
155095	7-9-1981	Do.	Process for the N-denitration of N, 2, 6-trinitroanilines with phase transfer catalysts.
155352	4-5-1983	Do.	Process for the preparation of pyridyl and quinolyl imidazolinones.

1	2	3	4
147196	20-4-1978	Combustion Engineering Inc., 1000 Prospect Hill Road, Windsor, Connecticut, U.S.A.	A system of producing slow BTU gas in an antrained 'flow coalgassifier.
149841	22-9-1978	Do.	An apparatus and method for separating low density char particles from higher density inert particles.
140881	4-1-1974	Dr. C. Otto & Comp. GmbH, 463, Bochum, West Germany.	A pressure reactor for producing a combustible gas.
144410	7-8-1976	Do.	A method for the production of coke using a battery of coke ovens with a regenerative change of draught.
152657	30-6-1980	Do.	A method of manufacture of coke.
143622	8-10-1975	E. I. Du Pont de Nemours & Co., Wilmington, Delaware, U.S.A.	Chloroalkali electrolysis cell employing ethylene diamine modified membrane.
144216	9-5-1975	Do.	An oriented filament of polyester and a method of making same.
150598	25-2-1980	Do.	Process for producing rutile TiO <sub>2</sub>
152693	11-12-1979	Do.	A method of producing an explosive composition of water-in-oil emulsion type.
153701	22-4-1981	Do.	Water removal in nitration of aromatic hydrocarbons.
154470	23-10-1980	Do.	Resin-bonded water-bearing explosive and a method for making the same.
144919	26-12-1975	Ethicon Inc., Somerville, New Jersey, U.S.A.	An improved surgical suture and method of preparing same.
149848	25-5-1978	Do.	A synthetic multifilament suture having poly (alkylene oxalate) absorbable coating and method for preparing the same.
151798	30-10-1979	Do.	Process for preparing elastomeric surgical sutures comprising segmented copolyether/esters.
150013	14-6-1978	General Electrical Company, 1, River Road, Schenectady 5, New York, U.S.A.	Process for making a sintered polycrystalline cubic boron nitride compact.
150315	13-10-1978	Do.	Process for preparing an integral composite of a polycrystalline diamond body and silicon carbide or silicon nitride substrate.
150647	19-9-1978	Do.	A process for preparing polycrystalline diamond body.
152258	11-9-1979	Do.	A process for producing a polycrystalline body of a predetermined shape.
152702	27-12-1979	Do.	A process for producing an integral composite of polycrystalline diamond and/or cubic boron nitride body phase and substrate phase.
152876	2-5-1980	Do.	Production of cubic boron nitride from powdered hexagonal boron nitride.
153075	9-4-1980	Do.	Process for preparing a polycrystalline diamond body.
153720	22-7-1980	Do.	An improved process for preparing a compact.
140296	16-1-1974	Hoechst Aktiengesellschaft, 6230, Frankfurt Main 80, West Germany.	Process for the after treatment of an azo pigments.
140366	22-1-1974	Do.	Production of vinyl chloride by thermal cracking of 1, 2-di-chloroethane.
140449	27-3-1974	Do.	Process for preparation of mono azo pigment.
140836	21-2-1975	Do.	Dyestuff composition for the dyeing or printing of cellulose fibre materials.



1	2	3	4
141413	16-1-1974	Hoechst Aktiengesellschaft, 6230, Frankfurt/ Main 80, West Germany.	Method for the treatment of crude azo pigments.
141682	16-1-1974	Do.	Process for transforming a disazo pigment into novel physical form.
141683	16-1-1974	Do.	A process for transforming a disazo pigment into a novel physical form.
141684	16-1-1974	Do.	A method for transforming a disazo pigment into a novel physical form.
142727	22-8-1974	Do.	Process for the preparation of new water-soluble yellow reactive dyes.
142825	2-9-1974	Do.	Process for the preparation of water-soluble monoazo compounds.
143191	17-10-1974	Do.	Process for the preparation of new water soluble azo dyestuffs.
143315	18-3-1975	Do.	Process for the preparation of new water soluble naphthyl monoazo pyrazolone dyestuff.
143335	28-1-1975	Do.	Process for the preparation of pure aromatic O-hydroxy-carboxylic acid aryl amides.
143365	18-6-1975	Do.	Process for the preparation of water soluble monoazo dyestuffs.
143374	24-10-1975	Do.	Process for the reactive dyeing and printing of fibrous materials containing hydroxy groups.
143734	2-4-1975	Do.	Liquid aqueous dyeing preparation of reactive dyes.
143735	2-4-1975	Do.	Liquid preparations of reactive dyestuffs.
143889	11-11-1975	Do.	A process for the manufacture of polymer mixture for making intermediate sheeting for laminated glass.
143982	17-11-1975	Do.	Liquid preparation of reactive dyestuffs.
144119	3-9-1975	Do.	A composition of matter comprising of dyestuff pigment and optical brightener and condensation product of alkyl naphthalene sulphonic acid and formaldehyde.
144220	27-4-1976	Do.	Process for the preparation of 5-acetoacetyl 2, 5-dimethoxy-4-chloroanilide.
144344	28-1-1976	Do.	An improved process for the preparation of water soluble azo dyestuffs.
144389	28-1-1976	Do.	A process for the preparation of liquid aqueous compositions of fibre reactive azo dyestuffs.
144449	7-5-1976	Do.	Process for the preparation of stable monoazo dyestuffs.
144514	28-5-1976	Do.	Process for the preparation of stable modification of a disazo dyestuffs.
144534	27-4-1976	Do.	Process for preparing-1 (n-B cyanoethylamine) 3-acylamino-benzenes.
144645	23-7-1976	Do.	Process for the preparation of water-soluble copper complex compounds.
144979	1-3-1976	Do.	Liquid composition soft reactive dyes.
146167	18-11-1977	Do.	Process for the preparation of water soluble dyestuffs.
146212	3-6-1977	Do.	A process for preparing stabilized red phosphorous.
146325	7-12-1977	Do.	A water free solid water soluble dyeing compositions.

1	2	3	4
146933	15-9-1977	Hoechst Aktiengesellschaft, 6230, Frankfurt/ Main 80, West Germany.	Process for modifying mixtures of azo dyestuffs unstable under dyeing condition
147048	3-12-1977	Do.	Process for making stabilized, red phosphorus.
148129	27-7-1977	Do.	Improved process for the manufacture of B-Sulphate ethyl-sulphonyl amino phenol compounds.
148322	27-7-1977	Do.	Improved process for the production of an organic dyestuffs containing 1, 2, 3, or 4 B-Sulphate ethyl sulphonyl groups.
148323	27-7-1977	Do.	Improved process for the production of an organic dyestuff containing 1, 2, 3 or 4 B- sulphate ethyl sulphonyl groups.
148409	7-4-1978	Do.	Process for the preparation of abrasion resis- tant non-dusting and water-soluble dyestuff particles in a fluidized bed
148625	27-2-1978	Do.	Process for the production of water insoluble azo dyestuffs on the fibre.
148986	17-5-1978	Do.	Process for the continuous manufacture of 3-nitro 4-acetyl amino-solone and corres- ponding apparatus;
149992	15-9-1978	Do.	Process for preparing a finely divided diox- azine pigment.
1550012	12-6-1978	Do.	A process for the preparation of azo pigment.
150125	8-12-1978	Do.	Process for the manufacture of a copper, cobalt or chromium complex compound of a monoazo compound.
150149	13-7-1978	Do.	Process for the preparation of polyvinyl butyral having improved properties.
150238	4-2-1980	Do.	Process for the preparation of 5-Nitrobenzi- dazolone-(2).
150312	14-8-1978	Do.	Process for the manufacture of fatty acid nitriles ad glycerol from glycerides especial- ly from natural fats and oils.
150365	26-10-1978	Do.	Process for the manufacture of water soluble dyestuffs.
150366	26-10-1978	Do.	Process for the preparation of water soluble azo dyestuff
150367	26-10-1978	Do.	Process for the preparation of water soluble dyestuffs.
150368	26-10-1978	Do.	Process for the preparation of water soluble dyestuffs.
150542	3-10-1978	Do.	Process for the preparation of water-soluble phthalocyanine compounds.
150592	21-12-1978	Do.	Process for the preparation of 5-(2'-hydroxy- 3' -Naphthylamino)-Benzimidazolone-(2).
150948	14-2-1979	Do.	A process for the manufacture of a new water- soluble dyestuffs.
150949	28-5-1979	Do.	Process for the preparation of water-soluble phthalocyanine dyestuffs.
150967	17-3-1979	Do.	Process for the preparation of red phosphorus stabilized against oxidation.
151048	22-3-1979	Do.	Improvements in a process for the continuous dyeing of flat textile structures made of cellulosic fibres and of the their mixtures with synthetic fibres.

1	2	3	4
151785	12-6-1979	Hoechst Aktiengesellschaft, 6230, Frankfurt/ Main 80, West Germany.	An improved process for continuous diazotization of amine.
152341	10-1-1980	Do.	A composition of a disperse dyestuff.
152346	17-3-1980	Do.	Process for the separation of 2-hydroxynaphthalene-3-carboxylic acid from the reaction mixtures alkali metal salts of 2-hydroxy naphthalene and carbon dioxide.
152496	3-11-1980	Do.	A process for the manufacture of copper complex formazan compounds.
152725	12-10-1979	Do.	Continuous production of azo pigments.
152786	14-12-1979	Do.	A process for the preparation of monoazo pigment which will have recrystallization resistant properties.
152897	24-10-1980	Do.	A pulverulent or liquid dyestuff composition.
152978	29-6-1981	Do.	Process for the preparation of water-soluble azo compounds.
152991	14-2-1979	Do.	A process for the manufacture of now water-soluble dyestuffs.
153342	23-12-1980	Do.	Process for the manufacture of desulfurizing agents based on calcium oxide containing calcium carbide for crude iron or steel melts.
153408	3-11-1980	Do.	Process for the preparation of copper formazan compounds.
153490	21-12-1978	Do.	Process for the preparation of 5-(2'-hydroxy-3'-naphthylamino)-Benzimidazolone- (2).
153496	3-11-1980	Do.	Process for the manufacture of stabilized pulverulent red phosphorous.
153853	16-5-1981	Do.	Process for dyeing and printing fiber materials containing or consisting of natural cellulose fibres regenerated cellulose fibres, natural polyamide fibres and/or synthetic fibres.
153956	10-4-1981	Do.	Process for the production of calcium carbide.
154195	26-10-1978	Do.	Process for the manufacture of water-soluble dyestuffs.
154434	1-7-1981	Do.	Process for the preparation of water-soluble phthalocyanine compounds containing a sulfonyl cyanamide group.
154589	28-4-1980	Do.	Process for the production of liquid chlorine.
154590	27-6-1980	Do.	Process for the production of calcium carbide.
154643	19-8-1980	Do.	Process for preparing water-soluble phthalocyanine compounds.
154872	4-3-1981	Do.	Process for the preparation of 1-(B-sulfatoethylsulfonyl-phenyl) pyrazolone by esterification.
154873	4-3-1981	Do.	Process for the preparation of sulfatoethylsulfonyl compounds.
154874	4-3-1981	Do.	Process for the preparation of aminobenzanilide-sulfuric acid half-ester compounds.
154951	3-6-1981	Do.	Composition containing colorals and esterified oxalkylates of aromatic hydroxy compounds.

1	2	3	4
154958	19-8-1980	Hoechst Aktiengesellschaft 6230, Frankfurt Main 80, West Germany.	A process for providing a fibre material with a finished (improved) property.
155265	23-12-1980	Do.	A process for manufacturing a desulfurizing agent.
155772	26-4-1982	Do.	Process for preparing anthraquinone com- pounds.
155789	21-8-1981	Do.	Process for making calcium carbide.
155836	5-1-1982	Do.	Process for the manufacture of mineral acid salt of diphenyl bases.
156278	18-10-1982	Do.	Process for preparing water-soluble monoazo- pyridone compounds.
156477	30-10-1981	Do.	Process for the preparation of water-soluble disazo compounds.
156687	16-8-1982	Do.	Process for the manufacture of monoazo dyestuffs.
156869	30-10-1981	Do.	A process for the preparation of water-soluble monoazo compounds.
143258	12-10-1976	Johnson & Johnson, 501, George Street, New Brunswick, New Jersey, U.S.A.	A conditioning and clearing shampoo com- position non-irritating to eyes.
144597	10-5-1977	Do.	Mixed block polymer adhesive.
145165	8-10-1976	Do.	Low irritation detergent composition.
146069	10-5-1977	Do.	Tacky adhesive composition.
149889	24-7-1978	Do.	Water based pressure sensitive adhesive and process for making the same.
150596	26-3-1979	Do.	Low irritating liquid detergent composition.
150992	10-8-1978	Do.	A process for producing adhesive tapes and sheets from thermoplastic elastomeric materials.
151359	10-8-1978	Do.	Pressure-sensitive adhesive composition.
153283	3-7-1981	Do.	A method of forming water resistant ortho- pedic cast.
155486	12-2-1982	Do.	A pressure-sensitive adhesive composition.
155957	19-8-1982	Do.	A process for preparing a composition for preventing dental enamel caries.
143800	20-9-1975	Metallgesellschaft Ag., 16, Frankfurt A.M. Keuterweg 14, West Germany.	Method of carrying out endothermic pro- cesses.
143802	31-5-1976	Do.	Process of separating solid granular meta- llurgical products and their precursors on a plurality of linearly vibrating screens.
143854	3-7-1975	Do.	Process of purifying gases produced by a gasification of solid fossile fuels by a treat- ment with water vapour and oxygen under super atmospheric pressure.
143905	2-4-1975	Do.	Process for the direct reduction of iron oxide containing materials in a rotary kiln.
144673	25-8-1976	Do.	Method of carrying out exothermic process.
144686	31-1-1977	Do.	Improvements in or relating to a process of directly reducing iron containing oxide materials to sponge iron.

1	2	3	4
145951	4-10-1977	Metallgesellschaft Ag., 16, Frankfurt A.M. Keuterweg 14- West Germany.	Process for regenerating water-containing methanol or other water containing highly volatile organic solvent from gases.
146890	13-10-1977	Do.	Process of regenerating laden absorbents which become available when hydrocarbon-containing gases are purified.
149817	5-4-1979	Do.	Steelmaking process.
149993	20-9-1978	Do.	Process of directly reducing iron oxide containing materials.
150387	30-8-1979	Do.	Process for briquetting sponge iron containing material.
150952	12-6-1980	Do.	Process of heat-treating pellets.
150990	19-5-1980	Do.	Process of directly reducing iron oxide containing materials in a rotary kiln.
151853	6-11-1979	Do.	Process of producing hydrogen fluoride.
152825	26-11-1980	Do.	A process for obtaining H.S. COS, and mercaptans free gas from gases containing the same by absorption in an absorbent solution.
152949	17-6-1981	Do.	Process of simultaneously producing fuel gas and process heat from carbonaceous materials.
153296	18-8-1981	Do.	Process for recovery of sulfur from acid gases containing hydrogen sulphide and other sulphur containing compounds.
140863	26-9-1974	Monsanto Company, 800 North Lindbergh, Bolevard St. Louis, Missouri 63177, U.S.A.	A continuous process for the production of ethylbenzene.
143457	2-1-1975	Do.	Process for producing styrene from folene.
143844	14-3-1975	Do.	Treated fibre and process for producing the same.
144577	20-7-1976	Do.	Process of making thermoplastics elastomeric compositions.
150497	8-11-1978	Do.	A process for preparing thermoplastic compositions.
150552	2-3-1979	Do.	A process of forming nitrodiaryl-amine by condensation of nitro-halorene and formyl derivative of a primary aromatic amine with alkali metal hydroxide.
150612	23-10-1978	Do.	The process for making nitrodiaryl amines.
150736	1-11-1978	Do.	A process for the preparation of nitro-diarylamine.
150804	4-1-1979	Do.	Process for making an amide of formic acid.
150937	3-3-1979	Do.	An improved process for the preparation of nitrodiaryl amines.
151020	1-11-1978	Do.	A process for the preparation of nitrodiaryl amines.
151581	6-8-1979	Do.	Process for separating gas from gaseous feed mixture.
153458	6-3-1979	Do.	Process for synthesizing ammonia from hydrogen and nitrogen.
155268	4-1-1979	Do.	Process for preparing nitrodiarylamine.
157128	21-7-1982	Do.	A process for encapsulating water-immiscible material within a shell wall of polyures.

1	2	3	4
143381	21-12-1974	Personal Products Company, Milltown, New Jersey, U.S.A.	Aldehyde polysaccharide dressings for absorbing body fluids.
144057	19-11-1975	Do.	A method of making absorbent cellulose particles.
144261	2-4-1975	Do.	A method for making cellulose graft copolymer.
146230	2-4-1975	Do.	A sanitary absorbent product having cellulose graft copolymer.
148085	14-3-1978	Shell Internationale Research Maatschappij, B.V. Carel Van Bylandtlaan 30, The Hague, The Netherlands.	Process for the partial combustion of finely divided solid carbonaceous fuel and reactor for carrying out the same.
150951	24-3-1980	Do.	Process for the preparation of hydrocarbons.
151797	29-10-1979	Do.	Process and equipment for the oxidation of soot obtained in the preparation of a gas mixture containing hydrogen and carbon monoxide.
152405	20-12-1979	Do.	Improvements in or relating to a process for regenerating solvents used in acid gas removal.
152671	2-4-1980	Do.	Process and burner for the gasification of solid fuel.
153718	1-7-1980	Do.	Process for the preparation of a hydrocarbon mixture.
153737	27-1-1981	Do.	A process for the preparation of hydrocarbon mixture from a mixture of carbon monoxide and hydrogen.
154191	26-3-1981	Do.	A process for the preparation of hydrocarbon.
154530	1-4-1981	Do.	A process for the synthesis of middle distillates of petroleum.
155483	14-10-1981	Do.	A process for preparation of oxygen-containing organic compounds and paraffinic hydrocarbons.
155493	24-4-1981	Do.	Method of treating wells with self-precipitating scale inhibitor.
155501	3-11-1981	Do.	Removal of hydrogen sulphide and carbonyl sulfide from gaseous mixtures.
155631	24-5-1982	Do.	Process for the removal of H <sub>2</sub> S from a sour gaseous stream.
155955	30-9-1980	Do.	Process for the partial combustion of solid particulate fuel for the production of fuel gas and burner for carrying out the process.
156108	3-5-1982	Do.	Process for the removal of H <sub>2</sub> S and CO <sub>2</sub> from gaseous streams optionally comprising hydrocarbons.
156182	2-1-1982	Do.	A process and apparatus for the preparation of cooled and purified gas from a hot gas.
147588	3-1-1978	Siemens Ag., Berlin & Munich, West Germany	A polymer stabiliser composition.
153721	29-7-1980	Do.	A stabilized composition of an organic material.
150389	4-3-1980	Stamicarbon B.V. P.O. Box 10, Geleen, The Netherlands.	Method for the production of benzaldehyde.
151516	4-3-1980	Do.	Method for the purification of benzaldehyde.
151776	13-6-1979	Do.	Process for the treatment of urea solutions and apparatus therefor.

1	2	3	4
151776	13-6-1979	Stamcarbon, NB.V. PO, Box 10, Geleen, The Netherlands.	Process for the treatment of urea solution and apparatus therefor.
152254	10-8-1979	Do.	Method for the direct reduction of iron using gas from coal.
152524	4-6-1980	Do.	Process for the preparation of filaments of high modulus and tensile strength.
152757	1-4-1980	Do.	Process for the preparation of a catalytic titanium component.
152758	1-4-1980	Do.	Process for the preparation of a catalytic titanium component.
152912	9-5-1980	Do.	Process for treating urea containing waste water for covering $\text{NH}_3$ and $\text{CO}_2$ therefrom and utilising said process in the process for preparing melamine.
153077	3-5-1980	Do.	Method for the preparation of melamine.
153973	25-8-1981	Do.	Process for the preparation of phosphoric acid calcium sulphate anhydride.
154019	26-4-1980	Do.	Thermosetting powder based on a unsatura- ted polyester resin and process for preparing the same.
154475	22-7-1981	Do.	Process for the preparation of copolymers of ethylene with atleast one other 1-alkene.
154476	22-7-1981	Do.	Process for the preparation of copolymers of ethylene with atleast one other 1-alkene.
154655	26-3-1981	Do.	Production of polyamide based objects and objects so produced.
154656	26-3-1981	Do.	Preparation of polytetramethylene adipamide.
154657	26-3-1981	Do.	Preparation of high molecular polytetra- methylen adipamide.
154820	7-5-1981	Do.	Process for the preparation of a supported chromium oxide type catalyst for the poly- merization of olefins.
155281	13-10-1982	Do.	Process for making polytetramethylene adi- pamide.
149510	10-7-1978	Voest—Alpine Aktiengesellschaft, A—1011 Vienna, Friedrichstrasse 4, Austria.	Process of treating sponge iron for protection against reoxidation and apparatus for carry- ing out the process.
151912	5-12-1980	Do.	Process and apparatus continuously reducing and melting of metal oxides and/or pre-redu- ced metallic materials.
153585	17-9-1981	Do.	Process for treating iron sponge.
156113	11-1-1983	Do.	Process for continuously drying and upgra- ding of organic solid materials such as, for example brown coals.
152676	28-4-1980	Westinghouse Electric Corporation, Westinghouse Building, Gateway Center, Pittsburgh, Pennsylvania 15222, U.S.A.	A method for preparing an electrostatic pow- der coating composition.
152814	27-7-1979	Do.	A method of preparing a clear solution of a metal alkoxide.
154902	21-10-1981	Do.	Process for preparing fluid polyester insulating composition.
155228	19-3-1981	Do.	Sprayable solventless adhesive-bracing com- positions and method of preparing the same.
156384	27-7-1979	Do.	A method of preparing an oxide coating on a substrate.

## COMMERCIAL WORKING OF PATENTED INVENTIONS

## MECHANICAL LIST NO. IV.

The following patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of Calendar year 1986 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	2	3	4
142022	5-4-1974	American Flange Manufacturing Company INC, 1100 West Blancke Street, Linden New Jersey, U.S.A.	Plastic closure bushing.
142222	9-5-1974	Do.	A tear-off convenience bottle closure.
142525	12-6-1974	Do.	A closure flange molded of synthetic plastic materials.
142874	5-5-1976	Do.	Bottle cap.
146215	17-9-1976	Do.	Retractable pouring spout closure.
147313	18-11-1976	Do.	An apparatus inspecting closure flanges.
147410	12-4-1977	Do.	Apparatus for conveying steel closure flanges.
149784	6-11-1975	Do.	Improvements in and relating to drum closure.
146518	23-9-1976	American Standard Inc., 40 West, 40th Street, New York-10018, U.S.A.	Brake control valve device with movable control reservoir charging valve.
147938	24-9-1977	Do.	An absorbing apparatus in a draftgear for railroad cars.
150945	13-10-1978	Do.	Housing for draft gear.
151772	16-5-1979	Do.	Improved freight brake control valve device.
153011	16-5-1980	Do.	Fluid pressure brake apparatus for a railway vehicle.
145632	25-1-1977	Combustion Engineering, Inc, 1000 Prospect Hill Road, Windsor, Connecticut, U.S.A.	A gas scrubber plant.
149226	13-9-1978	Do.	Improvements in gate valves for use in large size ducts having an obstruction such as an inner pipe extending there through.
149399	2-6-1978	Do.	A coal gasifier and a method of obtaining enriched heating gas there from.
149881	27-12-1978	Do.	Method of forming holes in metal parts and extruding nipples therein.
150157	21-3-1980	Do.	Combination of a fluidized bed reactor including a grid plate and means for introducing particulate matter on the upper surface of the grid plate.
150298	20-2-1979	Do.	A fluidized bed boiler with means for delivering fluidized air to the bed of the boiler.
151058	10-7-1979	Do.	A method of forming a socket weld connection.
151067	22-2-1979	Do.	Improvements in a fluidized bed system.
151565	7-9-1979	Do.	Improvements in a steam generator comprising means for separating steam from liquid water.



1	2	3	4
151718	20-3-1979	Combustion Engineering, Inc. 1000 Prospect Hill Road, Windsor, Connecticut, U.S.A.	Apparatus for providing heat energy.
152022	19-11-1979	Do.	Once through sliding pressure steam generator.
152076	22-3-1980	Do.	Fluidized bed type reactor for the combustion of pulverised coal.
152089	18-8-1979	Do.	A fluidized bed combustor for the burning of pulverized fuel.
152094	13-5-1980	Do.	Combustion system.
152177	11-2-1981	Do.	A fluidized bed system having a plurality of grate plates in the grate means.
152259	30-10-1981	Do.	Apparatus and method for upsetting of tube ends.
152283	5-3-1980	Do.	An apparatus for removing gaseous pollutants formed during the combustion of fuels in a furnace.
153708	15-7-1981	Do.	Fuel feed system for a fluidized bed of granulated solid fuel.
153711	11-8-1981	Do.	An apparatus for feeding particulate material into a high pressure zone.
153714	17-1-1980	Do.	A structure for inserting a fluid lance within a furnace.
153851	11-3-1981	Do.	A bowl mill for pulverizing coal having electronic controller of hydraulic pressure for journal loading of said bowl mill.
153895	29-1-1981	Do.	Solid fuel feed system for a fluidized bed.
154095	1-4-1980	Do.	Bowl mill for effecting the pulverization of material.
154145	30-7-1980	Do.	Tubular member for use in boiler and means for exercising control over the movement of the fluid in the tubular member.
154612	1-10-1981	Do.	Removable seal for ash hoppers and the like.
154648	28-2-1981	Do.	A method for the utilisation of particulate matter obtained from a fluidized bed boiler.
154821	3-6-1981	Do.	A water seal for an ash disposal system for coal fired or ash bearing fuel fired combustion chamber.
154941	9-9-1981	Do.	A hopper for storing ash particles from the furnace chamber of a steam generator.
155117	26-2-1982	Do.	Spray head assembly for spray dryer for injecting a slurry into spray drying chamber.
155170	1-7-1982	Do.	Spray nozzle for spraying a slurry into a spray drying chamber.
156097	22-3-1982	Do.	Flow splitter for dividing a stream of pulverulent material into multiple streams.
156519	15-3-1983	Do.	Apparatus for reheating a flue gas stream.
141224	24-4-1974	Dr. C. Otto & Company, GmbH 463, Bochum West Germany.	Process for the quenching of hot coke discharged from a cooking oven.
141434	24-4-1974	Do.	Coke oven door.
142312	11-11-1974	Do.	Flue gas collector main or regeneratively heated coke ovens.

1	2	3	4
143275	31-3-1975	Dr. C. Otto & Company, GmbH 463, Bochum, West Germany.	A coke guide machine movable on the coke side of coke oven batteries.
143499	1-2-1975	Do.	Underjet coke oven batteries.
144112	10-2-1977	Do.	Device for discharging dusty gases resulting from the pushing of cooking ovens.
146160	15-3-1977	Do.	Apparatus for cleaning the doors of cooking.
148626	3-4-1978	Do.	Means for supporting the battery decking of underjet coke ovens.
152170	30-5-1981	Do.	Closing and opening device for use in coke ovens.
152515	7-12-1979	Do.	Vertical chamber for the continuous dry quenching of coke.
152680	2-6-1980	Do.	A method of renewing the brick work of coke ovens.
152766	31-10-1980	Do.	Coke car for coke ovens.
153268	2-6-1980	Do.	A coke oven battery.
153277	4-12-1980	Do.	Door extractor for the closures of horizontal coke ovens.
153338	2-6-1980	Do.	Extraction of gases evolved in the charging of coke ovens.
153339	24-11-1980	Do.	Coke oven battery adapted to be regeneratively heated by lean gas or rich gas at choice.
153570	25-2-1980	Do.	Nozzle provided with several outlet apertures for coke ovens.
141681	15-1-1974	E.I. Du Pont De Nemours & Company, Wilmington, Delaware, U.S.A.	Process for continuously forming compartmented packages and compartmented packages so formed.
149159	6-12-1977	Do.	Low energy explosive connecting cord and cord manufacturing method and apparatus.
150363	9-8-1978	Do.	A method of anchoring or fixing a reinforcing member in a hole and a compartmental package grouting system for use therein.
153947	6-11-1980	Do.	A compartmented grout cartridge for use in anchoring a reinforcing member in a hole.
142891	18-8-1976	Ehticon Inc., Somerville, New Jersey, U.S.A.	Surgical adhesive tapes.
144352	14-2-1977	Do.	A needle suture combination and method of preparing the same.
145409	14-12-1976	Do.	Absorbable surgical suture and a process for preparing same.
149040	25-5-1978	Do.	A package for multistrand surgical suture.
151996	12-2-1980	Do.	A hemostatic plastic clip.
152006	12-2-1980	Do.	Instrument for applying ligating clips.
155971	16-7-1982	Do.	An improved ligating clip package.
156383	7-2-1983	Do.	An improved retainer for needled surgical sutures.
156669	21-7-1982	Do.	An improved cartridge for homostatic clips.
140084	21-5-1974	G.D. Societa Per Azioni, Via Pomponia, 10, Bologna, Italy.	Apparatus for accumulating and supplying lengths of material in sheet form particularly cuttings or packet blanks and similar to cigarettes packaging machines of the hinged lid type.

1	2	3	4
143500	14-3-1975	G.D. Societa per Azioni, (vis) Pomponia, 10- Bologna, Italy	Device for supplying pieces of wrapping material to wrapping machines improved to prepare the said pieces for use in particular as the inner wrap in cigarette packets of the hinge lid type.
144067	19-11-1974	Do.	Device for feeding wrapping material.
144864	14-3-1975	Do.	Device for varying the forward movement arrangement of packets of cigarettes.
145401	17-3-1977	Do.	Device for check and discard lengths of wrapping materials (foil) in very high speed packet cigarette packets.
145490	17-3-1977	Do.	Device for putting the inner foil wrapper with the lengths long ends over one of the larger faces of the bundle of cigarettes in a very high speed soft packet cigarette packet.
139185	7-8-1974	General Electric Company, 1, River Road, Schenectady 5, New York, U.S.A.	Cooling system for cooling internal combustion engine.
139389	20-3-1974	Do.	A composite wire drawing die.
148419	20-1-1978	Do.	Temperature resistant machine tool component and method for making same.
153134	22-10-1980	Do.	Improved method of making diamond compacts for rock drilling.
153537	27-12-1980	Do.	Continuous metal casting method, apparatus and products.
154864	21-4-1980	Do.	Bearing structure for large rotating shaft and in particular to self-aligning journal thrust bearing and bearing support.
155060	28-7-1981	Do.	In a power plant a system for controlling the operation of a steam turbine.
139374	26-6-1974	Girling Limited, Kings Road, Tyseley, Birmingham 11, England.	A control valve assembly for a vehicle and dual circuit braking system.
141053	13-2-1975	Do.	Improvements in disc brakes for rail vehicles.
142145	20-3-1975	Do.	Improvements in vehicle disc brakes.
142345	18-9-1974	Do.	Brake pressure control valves.
143076	25-10-1975	Do.	Improvements in actuator assemblies for vehicle brakes.
143992	7-12-1974	Do.	Master cylinder for braking systems.
149239	10-5-1979	Do.	A disc brake for vehicles.
147116	1-3-1978	Hoechst Aktiengesellschaft (Hoechst Ag.) 6230, Frankfurt/Min 80, West Germany.	Process and device for the manufacture of a tube end of thermoplastic material.
155502	3-4-1982	Do.	Metering device.
140747	20-3-1975	Johnson & Johnson, 501 George Street New Brunswick, New Jersey, U.S.A.	A blood filter unit.
140784	20-3-1975	Do.	Blood filtration unit.
141920	29-10-1974	Do.	Anti-fog surgical face mask with slits.
142237	23-8-1974	Do.	Surgical drape for use on an operation table.
142238	23-8-1974	Do.	Self-adhesive surgical drape.
142385	15-10-1975	Do.	A surgical face mask.
143246	26-6-1976	Do.	Process for producing adhesive tapes from thermo plastic elastomeric materials.
143598	15-10-1975	Do.	Surgical dressing.
145168	18-1-1977	Do.	A stabilized flavoured tooth cleaning article.
145944	21-6-1977	Do.	Reticular web.

1	2	3	4
146649	6-6-1977	Johnson & Johnson, 501 George Street New Brunswick, New Jersey, U.S.A.	A self supporting elastic and thermoplastic film and process for extruding the same.
146650	7-6-1977	Do.	A highly flexible and comfortable disposable absorbent dressing.
146826	9-8-1977	Do.	Pressure sensitive adhesive tape.
148709	21-10-1978	Do.	A water resistant orthopaedic bondage.
149493	8-3-1979	Do.	Paper surgical tape.
149758	19-2-1979	Do.	Layered absorbent structure.
149759	19-2-1979	Do.	A sanitary napkin disposable diaper and catamential tampon having a core of absorbent product.
150099	24-7-1978	Do.	Normally nontacky adhesive tape.
154121	15-7-1981	Do.	A method for forming a body fluid absorbent from peat moss and absorbent so prepared.
143015	15-10-1975	Metallgesellschaft Ag., 16, Frank Furt A.M., Reuterweg 14, West Germany.	Improved combustion system for pelletizing apparatus of the travelling grate type.
143376	5-12-1975	Do.	A method for the production of heat by combustion of carbonaceous materials.
152530	7-10-1980	Do.	Apparatus for regenerating absorbent.
153275	21-11-1980	Do.	Process of drying and calcining bulk materials.
143209	23-12-1974	Monsanto Company, 800 North Lind Bergh Boulevard, St. Louis, Missouri 63177, U.S.A.	A process for manufacturing a fiber reinforced extrudate and a fiber reinforced hose obtained therefrom.
147738	14-11-1977	Do.	Multi-component membrane comprising a porous separation membrane for gas separations and processes for gas separations using the multicomponent membranes.
144844	8-3-1977	N.V. Philips' Gloeilampenfabrieken, Emmasingel, Eindhoven, The Netherlands.	A metallized plastic reflection and a method of manufacturing the same.
139548	5-10-1974	Palitex Project-Company, GMBH, Weeserweg 8, 415 Krefeld, West Germany.	Anti-baklooning device for twisting machines.
143450	9-6-1975	Do.	A spinning or twisting spindle in particular a double twisting spindle.
143884	5-8-1975	Do.	A double or two for one twisting spindle and a spinning or twisting machine incorporating it.
145986	19-3-1977	Do.	Two-for-one twisting spindles.
149028	7-10-1977	Do.	Two-for-one double twisting machine.
149198	10-10-1977	Do.	Two-for-one twisting machine.
151203	18-1-1979	Do.	Apparatus for use with a two-for-one twisting spindle for the taking up of and tension free release of a single pre-determined length of thread or the like.
151736	10-7-1979	Do.	Two-for-one twisting spindle.
152075	22-2-1980	Do.	Thread brake for a two-for-one twisting spindle.
152211	11-4-1980	Do.	A thread brake.
152223	23-7-1979	Do.	A thread take-up assembly.
152267	27-7-1979	Do.	Device for de-activation and re-activation of textile apparatus more especially a two-for-one twisting spindle.
153083	27-8-1980	Do.	A two-for-one spinning or twisting spindle having a compressed air-operated threading arrangement.

1	2	3	4
153910	2-8-1980	Palitex Project-Company, GMBH, Weesterweg 8, 415 Krcfeld, West Germany.	Thread storage member for a two for one twisting spindle or spinning spindle.
153934	2-8-1980	Do.	Two for one twisting spindle with a supply receptacle for a lubricant.
154484	10-12-1981	Do.	Carrier device for at least two twister or bobbin tubes.
154584	16-4-1981	Do.	Thread brake.
154894	5-6-1981	Do.	Apparatus for the controlled feeding and taking off of a thread into or out of a thread treatment section.
155078	21-7-1981	Do.	Pull-off aid for drawing threads from at least two bobbins.
155371	13-5-1982	Do.	Two-for-one twisting spindle.
155877	31-5-1982	Do.	Apparatus for use in the withdrawal of yarn from a yarn package.
143891	27-11-1975	Personal Products Company, Milltown, New Jersey, U.S.A.	Absorbent product with reduced sloughing properties and a catamenial tampon using same.
144058	19-11-1975	Do.	Improved absorbent product with an absor- bent core.
145028	21-1-1977	Do.	An absorbent product such as sanitary nap- kins and diapers.
145982	21-1-1977	Do.	Protective absorbent liner for vether gar- ments.
146794	21-1-1977	Do.	Non-planar arcuate shaped absorbent liner such as sanitary napkins and panty shield.
147214	19-11-1975	Do.	A catamenial device.
148710	19-4-1979	Do.	Sanitary napkins.
149816	4-9-1978	Do.	A method of producing a sort comfortable catamenial tampon sealed in liquid imper- meable container or envelops.
141428	2-7-1975	Shell International Research Maatschappij B.V., Carel Van Bylandtlaan 30, The Hague, The Netherlands.	Apparatus for feeding finely divided solid fuel to a high pressure gasification chamber.
142509	1-10-1975	Do.	Improvements relating to high pressure gasification.
143291	13-5-1975	Do.	Apparatus for the gasification of finely divided fuel.
152816	21-11-1979	Do.	Apparatus for injecting particulate polymer into a pipeline hydrocarbons.
153671	21-1-1981	Do.	Exothermic reactor for use in the preparation of hydrocarbons from a mixture of hydrogen and carbon monoxide.
155455	16-9-1981	Do.	Apparatus for separating liquid gas mixture.
149581	9-11-1978	Siemen Ag. Berlin & Munich, West Germany.	Axial fan.
152729	8-2-1980	Stamicarbon B.V., P. O. Box 10, Geleen, The Netherlands.	Process for making polymer filaments of high tensile strength and modulus.
154059	30-3-1981	Do.	Device for the spraying of a liquid by means of a gas.

1	2	3	4
139602	4-6-1974	USS Engineers and Consultants, Inc., 600 Grant Street, Pittsburgh State of Pennsylvania, U.S.A.	Apparatus for introducing gas to hot metal in a bottom pour vessel.
141631	27-2-1974	Do.	Operating mechanism for slidable gates of bottom pour vessel.
143588	27-2-1974	Do.	An arrangement for conducting gas to a permeable plug in combination with a bottom pour vessel.
147668	12-1-1977	Do.	Subsurface pumping installation for handling viscous or sand laden fluids.
148762	8-8-1977	Do.	A nozzle for preventing alumina build-up during continuous casting of aluminium killed steel.
149715	20-8-1975	Do.	Method and apparatus for locating improperly positioned or bent rolls.
155550	3-10-1975	Do.	Slidable gate mechanism.
152919	18-11-1980	Voest—alpine Aktiengesellschaft, 1011—A Vienna, Friedrichstrasse, 4, Austria.	Movable bucket-wheel excavator.
154097	2-12-1980	Do.	Movable bucket-wheel excavator.
155284	11-1-1983	Do.	Device for drying of solid materials.
155873	29-4-1982	Do.	Device for drying coal.
142666	16-7-1974	Westinghouse Electric Corporation, Westinghouse Building, Gateway Center, Pittsburgh, Pennsylvania 15222, U.S.A.	High pressure taminate and method of making the same.
145417	23-10-1976	Do.	A method of producing homogeneous sintered 2 No non linear resistors, sintered resistors body obtained thereby and lightening arrestor containing the same.
148055	7-4-1977	Do.	A rotor assembly for a gas turbine engine.
148148	3-9-1977	Do.	Apparatus for applying insulating coating on elongated metallic chamber.
149598	17-5-1978	Do.	Extrudable oil-permated lubricant wicking material and method of making same.
152440	16-9-1980	Westinghouse Electric Corporation, Westinghouse Building, Gateway Center, Pittsburgh, Pennsylvania 15222, U.S.A.	Heat Exchangers.
152740	2-8-1980	Do.	A method of applying an entire fleetiae coating on silicon and a coated silicon chip thereby obtained.
155658	15-2-1982	Do.	Catalytic combustion system for stationery gas turbine.
155659	15-2-1982	Do.	Improved catalytic combustion system for a stationary combustion turbine having a transition duct mounted catalytic element.
156289	17-9-1982	Do.	Centrifugal fan wheels.

## GENERAL FEES PAID

142145 142636 143673 143734 143905 144027 144046 144220  
 144384 144534 144620 144724 144818 144870 145850 147141  
 147272 148037 148415 148557 148590 148637 148868 149554  
 149565 149817 149888 150021 150239 150381 150373 150532  
 151876 151877 151946 152037 152220 152293 152349 152407  
 150571 150684 150865 150859 151191 151389 151451 151669  
 152432 152626 152675 152732 152741 152910 152952 153131  
 153217 153360 153499 153620 153768 153916 154014 154336  
 154601 154626 154658 154840 155103 155290 155329 155407  
 155422 155429 155436 155591 155597 155772 155783 155871  
 155872 155961 155998 156434 156478 156484 156597 157099  
 157101 157222 157356 157481 157529 157566 157608 157683  
 157764 157765 157774 157807 157860 157863 157943 157970  
 157976 158064 158067 158085 158094 158095 158107 158198  
 158265 158272 158295 158325 158331 158332 158370 158442  
 158452 158455 158462 158468 158469 158488 158491 158511  
 158519 158528 158541 158554 158563 158567 158570 158574  
 158618 158656 158662 158689 158706 158768 158790 158999

## REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry as the date of registration of the design included in the entry.

Class. 1. No. 158712. Peico Electronics & Electricals Limited of Shivasagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, an Indian Company. "Colour Television". 21st August, 1987.

Class. 1. No. 158782. Hans Raj trading as Gem Traders, whose address is 10/60C, Kirti Nagar Industrial Area, New Delhi-110015, India, an Indian National, "Name Plate". 9th September, 1987.

Class. 1. No. 158783. Gem Traders whose address is 10/60C, Kirti Nagar Industrial Area, New Delhi-110015, India, an Indian National. "Name Plate". 9th September, 1987.

Class. 3. No. 158713. Peico Electronics & Electricals Limited of Shivasagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, an Indian Company "Colour Television". 21st August, 1987.

Class. 3. Nos. 159325 to 159332. Bata India Limited, 30, Shakespheare Sarani, Calcutta-700017, West Bengal, India. "Sole for the footwear". 27th January, 1988.

Class. 10. No. 158781. Liberty Footwear Company, Liberty House Extension, Karnal, Haryana, India, an Indian Partnership firm. "Slipper" 9th September, 1987.

*Stn. of Copyright for the Second period of five years.*

Nos. 153035, 153036, 152924, 152095, 152096, 152561—Class-I.

Nos. 152347, 152482, 152583, 153898, 152464, 153899, 157872, 157873, 157674, 153370, 153914, 153915, 152560, 152471, 151985, 152125—Class-3.

*Extn. of Copyright for the Third Period of five years.*

Nos. 146524, 146520, 144233, 144767, 147143, 152095—Class-I.

Nos. 153898, 153899, 146653, 146351, 146462, 144340, 157872, 157873, 157674, 147629, 155104—Class-3.

R. A. ACHARYA  
 Controller General of Patents,  
 Designs and Trade Marks.

